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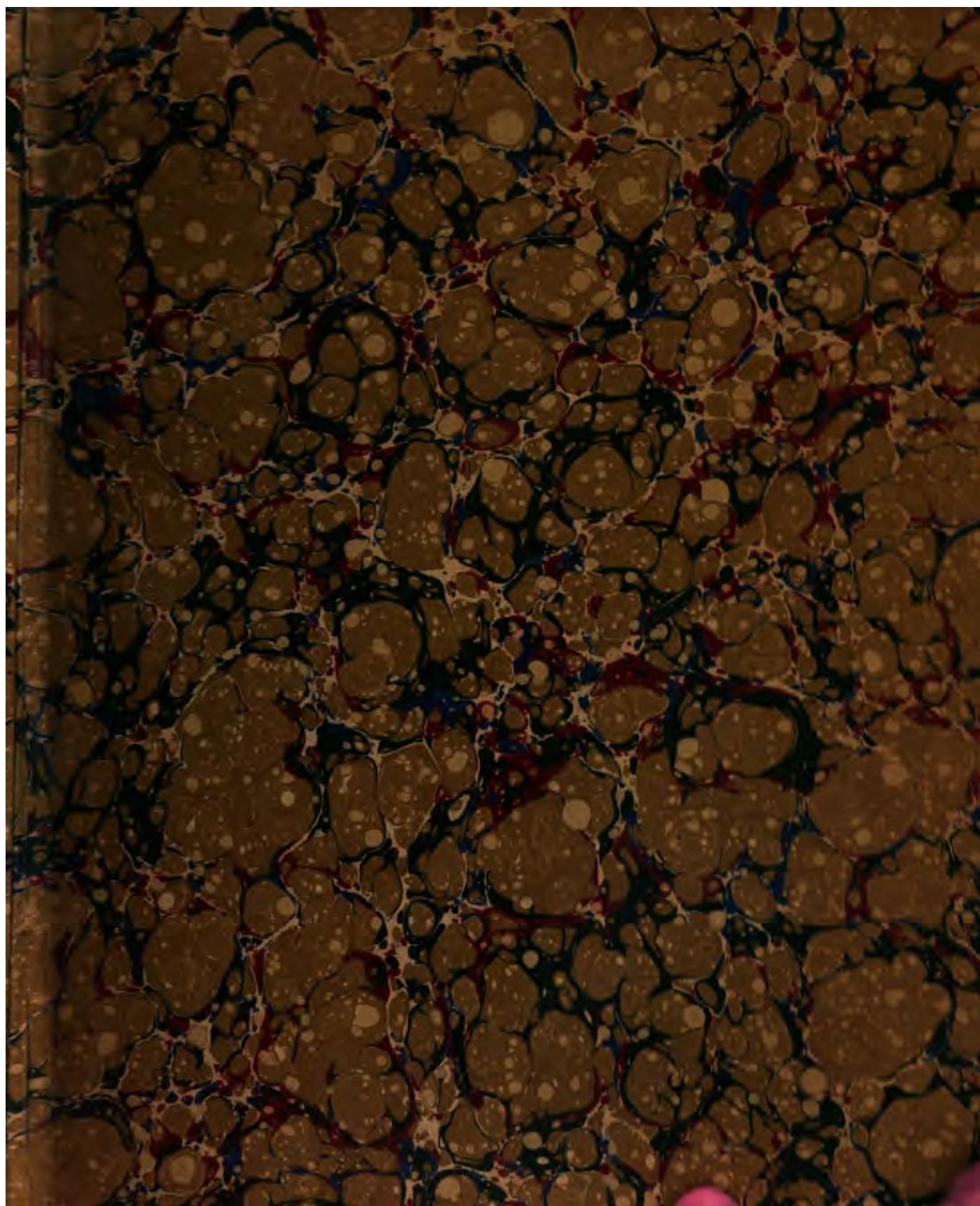
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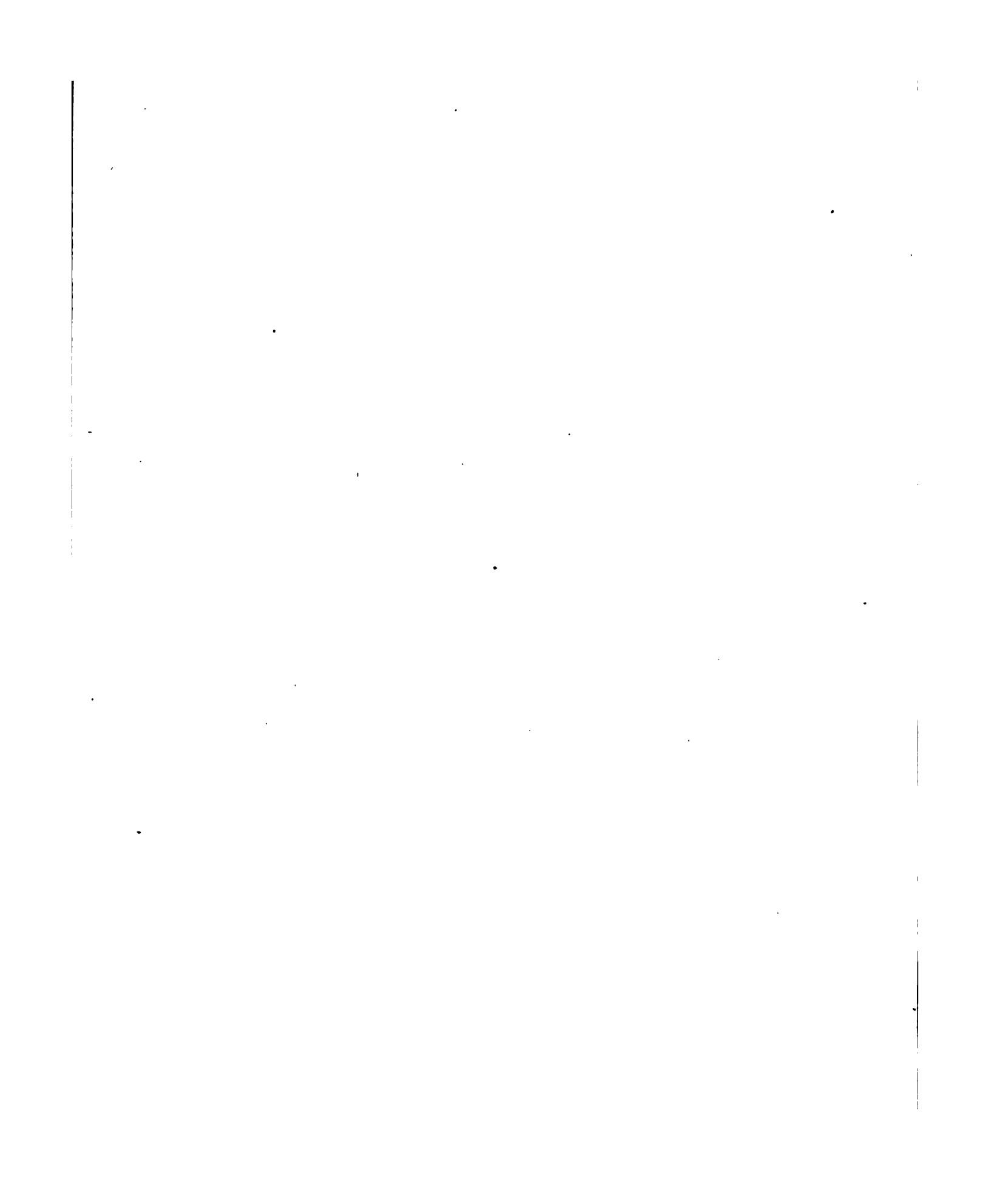


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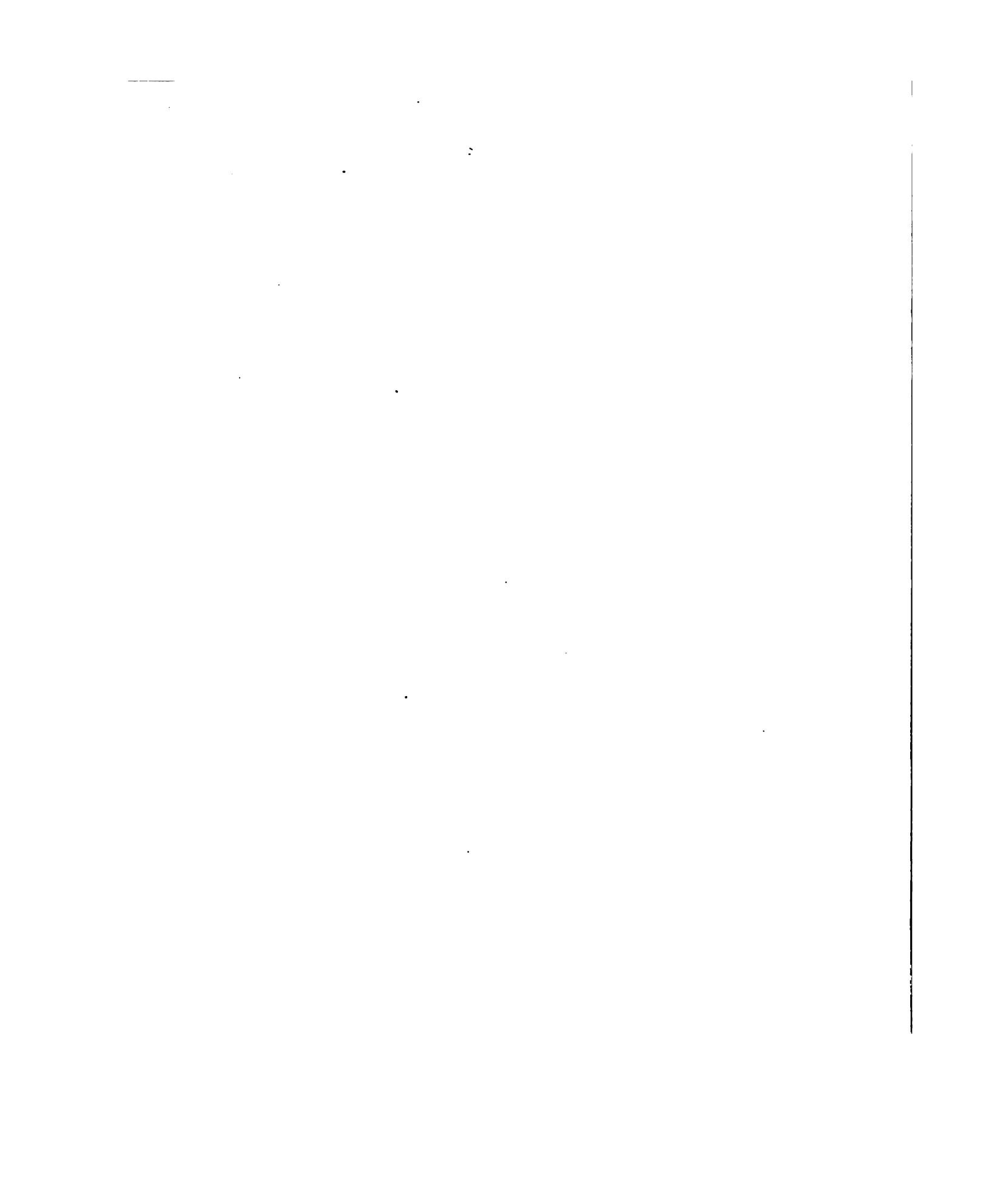
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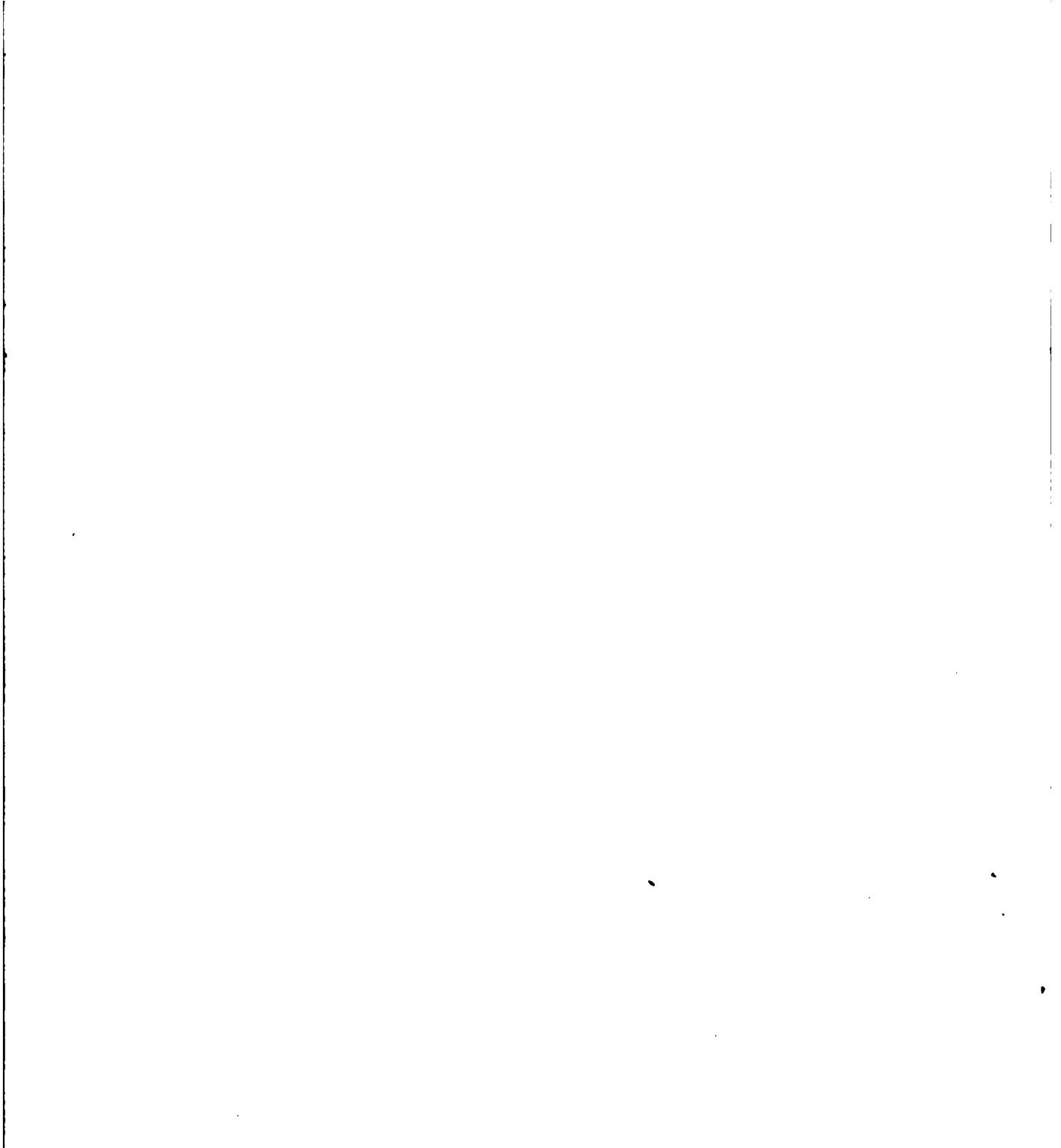
*The Eighth
Annual Conference*

HELD IN
CAMBRIDGE, MASSACHUSETTS
November Twenty-third and Twenty-fourth, 1906



*THE ASSOCIATION
OF
AMERICAN UNIVERSITIES*

1906—1907



The Association of American Universities

JOURNAL
OF
PROCEEDINGS AND ADDRESSES
OF THE
EIGHTH ANNUAL CONFERENCE

HELD IN
CAMBRIDGE, MASSACHUSETTS

NOVEMBER 23 AND 24

1906

STANFORD LIBRARIES

1907
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CONTENTS

| | PAGE |
|--|-------------|
| MEMBERSHIP | 7 |
| CALENDAR OF CONFERENCES | 8 |
| OFFICERS FOR 1907-1908 | 8 |
| PROCEEDINGS OF THE EIGHTH ANNUAL CONFERENCE | 9-15 |
| FIRST SESSION—MINUTES | 9-II |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 9 |
| SECOND SESSION—MINUTES | II |
| THIRD SESSION—MINUTES | II, 12 |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 12, 13 |
| FOURTH SESSION—MINUTES | 13-15 |
| PAPERS AND DISCUSSIONS AT THE EIGHTH ANNUAL CONFERENCE: | |
| THE FIRST SESSION: | |
| PAPERS on “ <i>The Appointment and Obligations of Graduate Fellows,</i> ” by Mr. Hall and Mr. Comstock | 16 |
| DISCUSSION by Mr. Carpenter, p. 44; Mr. Remsen, p. 45; Mr. Comstock, p. 45; Mr. Small, p. 45; Mr. Woodward, p. 45; Mr. Haskins, p. 46; Mr. Van Hise, p. 46; Mr. Small, p. 47; Mr. Eliot, p. 47. | |
| THE SECOND SESSION: | |
| PAPERS on “ <i>The Exemption of Educational Institutions from Taxation,</i> ” by Mr. Eliot and Mr. Page | 48 |
| DISCUSSION by Mr. Thompson, p. 56; Mr. Eliot, p. 57; Mr. Jordan, p. 57; Mr. Eliot, p. 58; Mr. West, p. 58; Mr. Van Hise, p. 59; Mr. Wheeler, p. 59; Mr. Eliot, p. 59; Mr. Page, p. 60; Mr. Eliot, p. 60; Mr. Jordan, p. 60; Mr. Hall, p. 60; Mr. Eliot, p. 61; Mr. Woodward, p. 61; Mr. Eliot, p. 61; Mr. Remsen, p. 62; Mr. Haskins, p. 62; Mr. Van Hise, p. 62; Mr. Eliot, p. 62; Mr. Abbott, p. 62. | |
| THE THIRD SESSION: | |
| “ <i>The Best Means of Introducing the Pension System into American Universities</i> ” | 64 |
| DISCUSSION by Mr. Eliot, p. 64; Mr. Van Hise, p. 65; Mr. Eliot, p. 66; Mr. Small, p. 67; Mr. Eliot, p. 67; Mr. Jordan, p. 67; Mr. Van Hise, p. 68; Mr. Jordan, p. 68; Mr. Wheeler, p. 68; Mr. Munroe Smith, p. 69; Mr. Van Hise, p. 70; Mr. Jordan, p. 70; Mr. Page, p. 70; Mr. Eliot, p. 71; Mr. Van Hise, p. 71. | |
| THE FOURTH SESSION: | |
| PAPERS on “ <i>Should Men Bearing the Same Title in Any Institution Receive the Same Pay?</i> ” by Mr. Stillman (presented by Mr. Jordan) and Mr. Hutchins | 72 |
| DISCUSSION by Mr. Jordan, p. 100; Mr. Wheeler, p. 101; Mr. Munroe Smith, p. 102; Mr. West, p. 102; Mr. Hall, p. 103; Mr. Haskins, p. 104; Mr. Van Hise, p. 104; Mr. Comstock, p. 104; Mr. Page, p. 105; Mr. Eliot, p. 105. | |
| APPENDICES | 107 |

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MEMBERSHIP
OF
THE ASSOCIATION OF AMERICAN UNIVERSITIES

UNIVERSITY OF CALIFORNIA,
Berkeley, California

CATHOLIC UNIVERSITY OF AMERICA,
Washington, D. C.

THE UNIVERSITY OF CHICAGO,
Chicago, Illinois

CLARK UNIVERSITY,
Worcester, Massachusetts

COLUMBIA UNIVERSITY,
New York, N. Y.

CORNELL UNIVERSITY,
Ithaca, N. Y.

HARVARD UNIVERSITY,
Cambridge, Massachusetts

THE JOHNS HOPKINS UNIVERSITY,
Baltimore, Maryland

THE LELAND STANFORD JUNIOR UNIVERSITY,
Palo Alto, California

UNIVERSITY OF MICHIGAN,
Ann Arbor, Michigan

UNIVERSITY OF PENNSYLVANIA,
Philadelphia, Pennsylvania

PRINCETON UNIVERSITY,
Princeton, New Jersey

UNIVERSITY OF VIRGINIA,
Charlottesville, Virginia

UNIVERSITY OF WISCONSIN,
Madison, Wisconsin

YALE UNIVERSITY,
New Haven, Connecticut

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Madison, Wisconsin

YALE UNIVERSITY,
New Haven, Connecticut

CALENDAR OF CONFERENCES

FIRST ANNUAL CONFERENCE (organization),
Chicago, February 27, 28, 1900

SECOND ANNUAL CONFERENCE,
Chicago, February 26-28, 1901

THIRD ANNUAL CONFERENCE,
Chicago, February 25-27, 1902

FOURTH ANNUAL CONFERENCE,
New York, December 29-31, 1902

FIFTH ANNUAL CONFERENCE,
New Haven, February 18-20, 1904

SIXTH ANNUAL CONFERENCE,
Baltimore, January 12-14, 1905

SEVENTH ANNUAL CONFERENCE,
San Francisco, Berkeley, and Palo Alto,
March 14-17, 1906

EIGHTH ANNUAL CONFERENCE,
Cambridge, November 23, 24, 1906

OFFICERS

1907-1908

President—The representative of Cornell University

Vice-President—The representative of the Catholic University of America

Secretary—The representative of Columbia University (appointed at the Fourth Conference to serve for five years)

Additional members of the *Executive Committee*—The representative of the University of Pennsylvania; the representative of the University of Michigan

THE EIGHTH ANNUAL CONFERENCE

FIRST DAY'S PROCEEDINGS

FRIDAY, NOVEMBER 23, 1906

MINUTES

MEETING OF THE EXECUTIVE COMMITTEE

A meeting of the Executive Committee was held on Friday, November 23, 1906, at 9:30 A. M., in the Committee Room, Phillips Brooks House.

There were present the following members of the Executive Committee:

- For the University of California, *President*—Mr. Wheeler
- For Harvard University, *Vice-President*—Mr. Eliot
- For Columbia University, *Secretary*—Mr. Carpenter

The Secretary presented the FINANCIAL REPORT which, upon motion, was approved:

RECEIPTS:

| | |
|--------------------------------------|----------|
| From assessments 1906-1907 | \$399.90 |
| Balance on hand | 269.02 |
| | <hr/> |
| | \$668.92 |

EXPENDITURES:

| | |
|---|-------------------|
| For printing programs of Seventh Conference | \$ 14.75 |
| For stenographic services, Seventh Conference | 87.20 |
| Cheque to replace unendorsed Michigan cheque | 25.00 |
| For printing proceedings of Seventh Conference | 244.40 |
| For preparing, framing, and shipping Harper Memorial minute | 26.75 |
| For postage, express, and telegrams | 16.50 |
| | <hr/> |
| | \$414.60 |
| Balance on hand November 19, 1906 | <hr/> \$254.32 |

Upon motion, it was

Resolved, That the Executive Committee ask the Association to hold an evening meeting at 8:30 P. M., to consider the following question: The best means of introducing the pension system into American institutions of learning.

The Committee adjourned at 10 A. M.

CALENDAR OF CONFERENCES

FIRST ANNUAL CONFERENCE (organization),
Chicago, February 27, 28, 1900

SECOND ANNUAL CONFERENCE,
Chicago, February 26-28, 1901

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| For stenographic services, Seventh Conference | 87.20 |
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| For postage and telegrams | 16.50 |
| | <u>\$414.60</u> |
| Balance N | <u>\$254.32</u> |

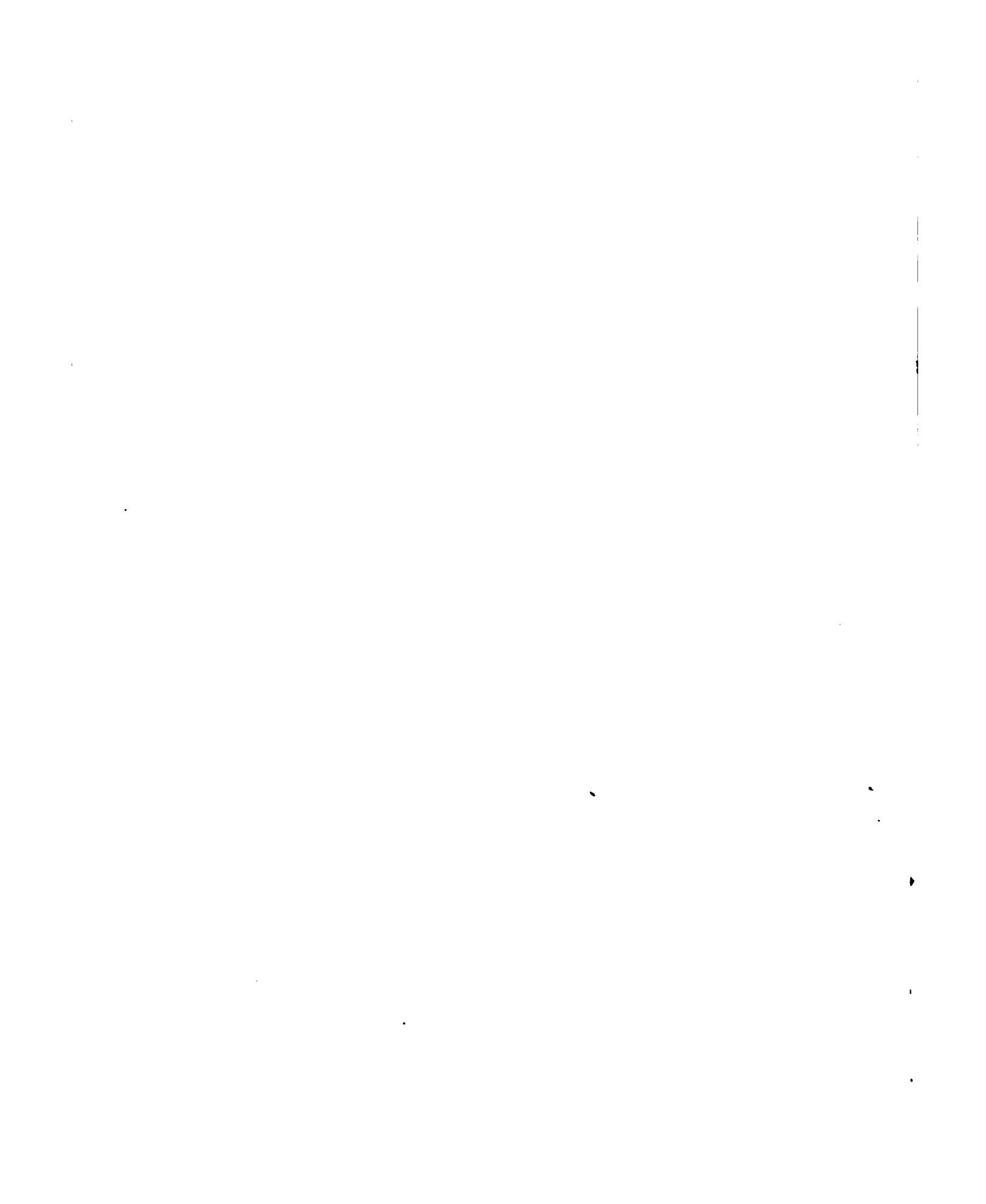
The Committee ask the Association to hold an evening meeting at the question: The best means of introducing the pension system learning.

Adjourned at 10 A. M.



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1906—1907



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Stanford University

1907
PUBLISHED BY THE ASSOCIATION

The Association of American Universities

UNIVERSITY OF CALIFORNIA—Continued

| | | | | | |
|---------|---|--|---|---|--|
| 1899 | ¹ Hough- ton | \$3,000 | \$79.71 (scholar- ship awarded, \$150) surplus of income devoted to occasional scholarship | Preference given to residents of Benicia; gradu- ates or under- graduates; pri- marily under- graduates | Character, ability and need |
| | Awarded by trus- tees of William and Alice Hinckley Fund | \$300 | | Students in state university or some other school; graduates or undergraduates | 1 year, may be reappoin- ted |
| 1905-06 | ¹ Stu- dents' gradu- ate ^a | \$153.63 | | | |
| 1901-05 | ¹ Semitic lan- guages El† | \$500 received for 1901-02 and same sum for 1902-03, 1903- 04, 1904-05 | \$500 | Graduates of the University | Ability to en- ter gradu- ate depart- ment |
| | | | | | Must be candi- date for Mas- ter or Doctor's degree and de- vote full time to study |

• The • indicates scholarships.

CLARK UNIVERSITY

The founder of Clark University and his wife during the early years jointly gave \$4,000 annually for scholarships and fellowships, and this contribution was continued by his wife for three years after his death, until her own in 1904. Since that date, the University scholarships and fel-
lowships have been placed on a permanent basis from the income of the George F. Hoar Fund of \$100,000 established by Andrew Carnegie.
Esquire, but reduced to \$3,000 per annum, the remainder of the income being appropriated to undergraduate scholarships in the collegiate department. The following table presents the present scheme of appointments at Clark.

| No. of Appointees | Designation | Value | Date of Estab- lishment |
|-------------------|--------------------|------------|----------------------------|
| 10..... | Senior fellowships | \$300 each | 1903 |
| 10..... | Junior fellowships | 200 each | 1903 |
| 10..... | Scholarships | 100 each | 1903 |
| 1..... | Citizens' Fund | 200 | 1891 |
| 1..... | Field scholarship | 20 | 1891 |

Besides these one or more scholarships or fellowships are provided for by an annual grant of \$500 as a President's Emergency Fund. All these appointments are annual, and most are made April 1, and the remainder in October. From all, the tuition fee is deducted. All applicants must have an academic degree from a reputable institution of collegiate or equivalent rank. Preference is given to those not intending to enter the professions of law, medicine, or technology and to those contemplating the degree of Ph.D., but others are not absolutely excluded. Women may be appointed, but rarely have been, and so far none have received a Senior fellowship. No duties are required and teaching either outside or within the institution, is forbidden. Each must, however, devote all his time to study and research in residence during incumbency, and may be reappointed. Awards are made with no reference to pecuniary needs and the stipend may be waived and the title retained. As three years are usually needed for those just graduated to proceed to the Doctor's degree, it often happens that those who take it have held a scholarship, a Junior, and a Senior fellowship, the latter being usually assigned only to those likely to take the Doctor's degree at the end of the year. For Senior fellowships also a good reading knowledge of French and German is inexorably required. Each of these 32 appointees must specialize in some one subject as a major. Appointments are distributed among the different departments at the discretion of the faculty, according to the number and merits of the candidates, so that each of the eight departments to which they are eligible may in successive years have a majority of all appointments or none.

The Eighth Annual Conference

19

CATHOLIC UNIVERSITY

| Date of Availability | Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Term and Conditions of Appointment | Tenure | Obligations |
|----------------------|--|---|---------------------------------|---------------|--|---|---------|-------------|
| Present | 1 <i>Hudson</i> 1 <i>Caldwell</i> 1 By a Priest of Pennsylvania 1 <i>Bewiser*</i> | Philosophy Theology | \$10,000† 10,000† 10,000† | | Priests of New York Priests of New York Priests of Baltimore General Diocese of Alton | Appointment by Bishop Appointment by Bishop Appointment by Bishop | 2 years | |
| Present | 1 <i>DeLobat*</i> | Theology | 5,000 | | Diocese of Pittsburgh | Appointment by Bishop | 2 years | |
| Present | 1 <i>Jenkins*</i> | Theology | 5,000 | | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Harper*</i> 2 <i>Roule*</i> | Theology Theology | 5,000 each | | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Nolan*</i> | Theology | 5,000 | | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Loyman*</i> | Theology | 5,000 | | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Martin*</i> | Theology | 5,000 | | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Lovin*</i> 3 <i>Prabody*</i> 1 <i>Carroll*</i> | Theology Chemistry and Physics Theology | 5,000 each | | Diocese of Cleveland | Appointment by Bishop | 2 years | |
| Present | 1 <i>Mitchell*</i> | Theology | 5,000 | | Diocese of Brooklyn | Appointment by Bishop | 2 years | |
| Present | 1 <i>Caldwell*</i> | Theology | 5,000 | | Diocese of Peoria | Appointment by Bishop | 2 years | |
| Present | 1 <i>Conroy*</i> | Theology | 5,000 | | Diocese of Albany | Appointment by Bishop | 2 years | |
| Not available | 1 <i>Burzell*</i> 1 <i>Dana*</i> | Theology Theology | 5,000 | | Diocese of General | Appointment by Bishop | 2 years | |
| Present | 2 <i>Hennessey*</i> | Theology | 5,000 each | | Diocese of Boston | Appointment by Bishop | 2 years | |
| Present | 1 <i>Lindsmith*</i> | Theology | 5,000 | | Diocese of Dubuque | Appointment by Bishop | 2 years | |
| Present | 1 <i>Brennan*</i> | Theology | 5,000 | | Diocese of Cleveland | Appointment by Bishop | 2 years | |
| Present | 3 <i>Rordan*</i> | Theology | 5,000 each | | Diocese of Erie | Appointment by Bishop | 2 years | |
| Present | 1 <i>Johnson*</i> | Theology | 5,000 | | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Not available | 1 <i>Murphy*</i> | Theology | 5,000 | | Diocese of Milwaukee | Appointment by Bishop | 2 years | |
| | | | | | Diocese of Manchester | Appointment by Bishop | 2 years | |

* The * designates scholarships.

† Not available yet.

UNIVERSITY OF CALIFORNIA—*Continued*

| | | | | | |
|---------|-------------------------|---------|---|---|---|
| 1899 | 1 Hough-ton* | \$3,000 | \$179.71 (scholarship awarded to residents of Benicia, graduates or undergraduates; primarily undergraduates) | Preference given to residents of Benicia, graduates or undergraduates; primarily undergraduates | Character, ability and need |
| | 1 Hinckley* | | Awarded by trustees of William and Alice Hinckley Fund | Students in state university or some other school; graduates or undergraduates | 1 year, may be reappointed |
| 1905-06 | 1 Students' graduates* | \$300 | \$155.65 | | |
| 1901-05 | 1 Semitic Languages El† | | \$500 received for 1901-02 and same sum for 1902-03, 1903-04, 1904-05 | Graduates of the University | Must be candidate for Master's or Doctor's degree and devote full time to study |

* The * indicates scholarships.

CLARK UNIVERSITY

The founder of Clark University and his wife during the early years jointly gave \$4,000 annually for scholarships and fellowships, and this contribution was continued by his wife for three years after his death, until her own in 1904. Since that date, the University scholarships and fellowships have been placed on a permanent basis from the income of the George F. Hoar Fund of \$100,000 established by Andrew Carnegie, Esquire, but reduced to \$3,000 per annum, the remainder of the income being appropriated to undergraduate scholarships in the collegiate department. The following table presents the present scheme of appointments at Clark.

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Besides these, one or more scholarships or fellowships are provided for by an annual grant of \$500 as a President's Emergency Fund. All these appointments are annual, and most are made April 1, and the remainder in October. From all, the tuition fee is deducted. All applicants must have an academic degree from a reputable institution of collegiate or equivalent rank. Preference is given to those not intending to enter the professions of law, medicine, or technology and to those contemplating the degree of Ph.D., but others are not absolutely excluded. Women may be appointed, but rarely have been, and so far none have received a Senior fellowship. No duties are required and teaching, either outside or within the institution, is forbidden. Each must, however, devote all his time to study and research in residence during incumbency, and may be reappointed. Awards are made with no reference to pecuniary needs and the stipend may be waived and the title retained. As three years are usually needed for those just graduated to proceed to the Doctor's degree, it often happens that those who take it have held a scholarship, a Junior, and a Senior fellowship, the latter being usually assigned only to those likely to take the Doctor's degree at the end of the year. For Senior fellowships also, a good reading knowledge of French and German is inexorably required. Each of these 32 appointees must specialize in some one subject as a major. Appointments are distributed among the different departments at the discretion of the faculty, according to the number and merits of the candidates, so that each of the eight departments to which they are eligible in successive years have a majority of all appointments or none.

The Eighth Annual Conference

19

CATHOLIC UNIVERSITY

| Date of Availability | Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|-----------------------|--|---|---------------------------------|---------------|--|--|---------|-------------|
| Present | 1 <i>Hudson</i> 1 <i>Caldwell</i> 1 By a Priest of Pennsylvania 1 <i>Bewiser*</i> | Philosophy Theology | \$10,000† 10,000† 10,000† | 5,000 | Priests of New York Priests of New York Priests of Baltimore General Diocese of Alton | Appointment by Bishop Appointment by Bishop Appointment by Bishop Appointment by Bishop | 2 years | |
| Present | 1 <i>DeLoach*</i> | Theology | 5,000 | 5,000 | Diocese of Pittsburgh | Appointment by Bishop | 2 years | |
| Present | 1 <i>Jenkins*</i> | Theology | 5,000 | 5,000 | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Harper*</i> 2 <i>Rewis*</i> | Theology Theology | 5,000 each | 5,000 each | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Nolan*</i> | Theology | 5,000 | 5,000 | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Loyman*</i> | Theology | 5,000 | 5,000 | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Martin*</i> | Theology | 5,000 | 5,000 | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Lovin*</i> 3 <i>Peabody*</i> 1 <i>Carroll*</i> | Theology Chemistry and Physics Theology | 5,000 each | 5,000 | Diocese of Cleveland Diocese of Brooklyn Diocese of Peoria | Appointment by Bishop Appointment by Bishop Appointment by Bishop | 2 years | |
| Present | 1 <i>Mitchell*</i> | Theology | 5,000 | 5,000 | Diocese of Albany General | Appointment by Bishop | 2 years | |
| Present | 1 <i>Caldwell*</i> | Theology | 5,000 | 5,000 | Diocese of Boston | Appointment by Bishop | 2 years | |
| Present | 1 <i>Conroy*</i> | Theology | 5,000 | 5,000 | Diocese of Dubuque | Appointment by Bishop | 2 years | |
| Not available Present | 1 <i>Burzell*</i> 1 <i>Dana*</i> | Theology Theology | 5,000 each | 5,000 each | Diocese of Cleveland Diocese of Erie | Appointment by Bishop Appointment by Bishop | 2 years | |
| Not available Present | 2 <i>Hennessy*</i> | Theology | 5,000 each | 5,000 each | Diocese of Baltimore | Appointment by Bishop | 2 years | |
| Present | 1 <i>Lindesmith*</i> | Theology | 5,000 | 5,000 | Diocese of Milwaukee | Appointment by Bishop | 2 years | |
| Present | 1 <i>Brennan*</i> | Theology | 5,000 | 5,000 | Diocese of Manchester | Appointment by Bishop | 2 years | |
| Present | 3 <i>Riordan*</i> | Theology | 5,000 each | 5,000 each | | | | |
| Present | 1 <i>Johnson*</i> | Theology | 5,000 | 5,000 | | | | |
| Not available | 1 <i>Murphy*</i> | Theology | 5,000 | 5,000 | | | | |

* The * designates scholarships.

† Not available yet.

The Association of American Universities

UNIVERSITY OF CHICAGO

| Dates | Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|-------|---|-----------|----------------|--------------------------------|--|--|--|--|
| 1896 | About 70 University | At large | | \$10,000 (\$120-\$520 each) | Graduates having done 1 year resident work. To student in medical school | Proficiency solely. Special weight given to research ability | 1 year. No statement in regard to reappointments | One-sixth time must be given to university service |
| | 2 Wm. A. and Fanny C. Talcott | At large | | 120 (= tuition fees) | Graduates of Rockford College primarily | Proficiency solely. | | One-sixth time must be given to university service |
| | 1 Bucknell | At large | | 400 | Graduates of Bucknell | Special wt. given to research ability | | One-sixth time must be given to university service |
| | 1 Joseph B. Lowenthal | Chemistry | | 420 | | Proficiency solely. | | One-sixth time must be given to university service |
| | 20 University scholarships | At large | | 120 (= tuition fees) | Graduates of Chicago University | Special wt. given to research ability | | One-sixth time must be given to university service |
| 1896 | 2 Wm. A. and Fanny C. Talcott | At large | | 120 (= tuition fees) | Graduates of Rockford College primarily | Excellence in work in Senior Colleges. | | Must remain at Chicago University |
| | Affiliation scholarships— | | | 120 each (= tuition) | Graduates of Kalamazoo College | | | |
| | 3 Kalamazoo College | At large | | 120 each (= tuition) | Graduates of Des Moines College | | | |
| | 3 Des Moines College | At large | | 120 each (= tuition) | Graduates of Butler College | | | |
| | 3 Butler College | At large | | 120 each (= tuition) | Graduates of John B. Stetson University | | | |
| | 3 John B. Stetson University | At large | | 40 (= tuition of one term) | Resident student | | | |
| | 3 scholarships for public speaking | At large | | 120 (= tuition) | Members of faculty and their wives | | | |
| | 40 scholarships for officers | At large | | 120 (= tuition) | Teachers in affiliated schools | | | |
| | ? scholarships for teachers in affiliated schools | At large | | | | | | |

COLUMBIA UNIVERSITY

The following general conditions apply, practically without exception, to all resident Fellows: They must not be over 30 on appointment. They must pay all fees. They may not accept remunerative employment without permission of the President. They may not give instruction in the University except incidentally. Incumbents who wish may waive the stipend while retaining the title.

| Year | Number of Fellowship Grants | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|------|-----------------------------|--|----------------|---------------|---|--|--|--|
| 1885 | 1 <i>Tyndall</i> | Physics | \$10,945.50 | \$ 648 | One or more American pupils of talent in physics, who are graduates of Columbia or 8 students in it | May hold employment | 1 year | Give evidence of progress quarterly to the President |
| 1889 | 1 <i>Barnard</i> | Physical research | 10,000 | 500 | Faculties, teaching staff, alumni, or students of Columbia | May hold employment Shall prosecute research either in Columbia or elsewhere | 1 year; incumbent is eligible to reapp'n't | Give evidence of progress quarterly to the President |
| 1904 | 1 <i>Adams Research</i> | Physical science, psychology, or practical applications | \$0,000. | 1,250 | | | | |
| 1896 | 1 Class of 70 | General income | | 500 | | | | |
| 1899 | 1 <i>Geo Wm. Curtis</i> | Political science (with special application to present conditions) | 10,000 | 600 | | | 2 years; awarded every third year | Must present monograph satisfactory to Faculty of Political Science and brief sketch of <i>George Wm. Curtis</i> |
| 1894 | 1 <i>Drister</i> | Classical philosophy | General income | 650 | A.B.'s of Columbia or equiv. with classics throughout the course and can read French and German | Must study at Columbia or by permission at some foreign university or classical school | 1 year; may be reappointed twice | |
| 1904 | 1 <i>Garth</i> | Political economy | \$16,250 | 650 | | | | |
| 1904 | 1 <i>Gottberger</i> | Philosophy, political science, or pure science | 9,500 | 779 | Only to Columbia M.A.'s after not less than 3 years resident study at Columbia | | 1 year; awarded biennially | |
| 1898 | 1 <i>Mosenthal</i> | Music | 7,500 | 600 | Talented students of musical composition; either men or women | Thorough knowledge of harmony and counterpoint; some ability to compose | 1 year; awarded every second year | |

COLUMBIA UNIVERSITY—Continued

| | | | | | | | | |
|------|---------------------------------|--|----------|--------|--|---|---|--|
| 1899 | 1 <i>Proudfoot</i> | English | \$15,000 | \$ 615 | Son of native-born American parents, having B.A. after 3 years residence at Columbia | Must remain unmarried | 1 year; may be renewed twice for reasons of weight | Liable to serve as proctors at autumn, semi-annual, and final exams; give evidence of progress without fee |
| 1898 | 1 <i>Schiff</i> | Political science | 15,000 | 600 | Graduates of Columbia of 3 years preceding | Non'ted by founder during his lifetime Ability for research, study at Columbia or at German university Competition in design. Must spend 1 year in the school as a graduate student in design | 1 year 1 year, biennially, for reasons of weight may be renewed 1 year without stipend of reappointment | Teach only to fill temporary vacancies; give evidence of progress at end of year |
| 1900 | 1 <i>Carl Schurz</i> | German language and literature | 10,000 | 800 | Graduates of Columbia of 3 years preceding | Competition in design. Must spend 1 year in foreign travel and study Same as Columbia and <i>McKim, tray.</i> Scholarship and ability to do research work | 1 year (an incumbent of proficiency and promise may be re-appointed once) 1 year; award'd every fourth year 1 year; may be re-appointed twice | Teach only to fill temporary vacancies; give evidence of progress at end of year |
| 1889 | 1 <i>Columbia Fellowship</i> | Architecture | 13,000 | 535 | Graduates of Columbia of 3 years preceding | Graduates of 6 preceding years | 1 year (an incumbent of proficiency and promise may be re-appointed once) 1 year; award'd every fourth year 1 year; may be re-appointed twice | Teach only to fill temporary vacancies; give evidence of progress at end of year |
| 1889 | 1 <i>McKissick</i> | Architecture | 20,000 | 840 | Graduates of 6 preceding years | Graduates of Columbia or institutions of equal standing | 1 year (with possibility of renewal for 1 year) | 1 year (possibility of renewal for 2 years) |
| 1898 | 1 <i>Perkins</i> | Architecture | 5,700 | 1,000 | Academic graduates not over 30 | General income | 1 year (with possibility of renewal for 1 year) | 1 year (possibility of renewal for 2 years) |
| 1898 | 14 <i>University</i> | (In permanent form 1890) | 650 | 650 | General income | General income | 1 year (with possibility of renewal for 1 year) | 1 year (possibility of renewal for 2 years) |
| | | SCHOLARSHIPS— | | | General income | General income | 1 year (with possibility of renewal for 1 year) | 1 year (possibility of renewal for 2 years) |
| | 30 <i>University</i> | Political science, philosophy and pure science | | | General income | General income | 1 year (with possibility of renewal for 1 year) | 1 year (possibility of renewal for 2 years) |
| | 8 <i>President's University</i> | 4 <i>Curtis University</i> | | | General income | General income | 1 year (with possibility of renewal for 1 year) | 1 year (possibility of renewal for 2 years) |
| | | 1 <i>Richard Buller</i> | | | General income | General income | 1 year (with possibility of renewal for 1 year) | 1 year (possibility of renewal for 2 years) |

In addition 5 fellowships and 35 scholarships are available in Teachers' College, the Department of Education of the University.

CORNELL UNIVERSITY

| Date | Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|------|---------------------------|---|----------------|--|---|--|---|---|
| 1893 | 1 University | 1 Mathematics 1 Chemistry; 1 Physics 1 Civil engineering 1 Neurology, physiol., etc. 1 Botany and geology 1 Architecture 1 Agriculture, horticulture, and veterinary science 1 English 1 Germanic languages 1 Romance languages 2 Mechanical and electrical engineering Modern history, political and social science | | \$500 each | Graduates of Cornell or institution of equal rank | High character and scholarship in some important department of study | 1 yr; re-appointed once | Liable to 4 hrs. a week teaching or in examinations |
| 1898 | 2 President White | | | | | | | Must spend 4 hrs. each day in President White Library |
| 1898 | 3 Susan Linn Sage | Philosophy Political economy Greek and Latin American history Architecture (1) traveling (2) resident | | 600 500 500 500 2,000 500 | | May be made traveling fellowships or both may be combined to one | Must be under 30 years; based on competition | |
| 1898 | Honorary | | | | | Grad. of Col. of Architecture or satisfactorily completed 2 yrs. special course of Graduates of School of Architecture of approved standing in the world Those already holding Doctor's degree | Conferred only on actual attendants at university | |
| 1898 | 6 Susan Linn Sage School* | Philosophy Mathematics Chemistry; 1 Physics Civil engineering Latin and Greek Archaeology and comparative physiology Neurology and physiol. etc., with entomology Botany and geology English; 1 History Mathematics | | 300 | | Remission of tuition but no stipend \$300 | | |
| 1896 | 1 Oliver Grad.* | | | 300 | | Same as University | | |

The * designates scholarships.

The Association of American Universities

HARVARD UNIVERSITY

GENERAL CONDITIONS OF HARVARD FELLOWSHIPS

The *Edward Austin* Fellowships and the *Austin* Teaching Fellowships can be held only by resident graduate students. The other fellowships may be, and some of them usually are, given to persons who desire to pursue studies abroad as non-resident graduate students. Non-resident appointments are awarded only to persons who have been resident students in some department of the University.

All appointments to fellowships are made for one year only. They may be awarded for a second or third year. The tenure of the fellowships has lately been restricted, however, in the greater number of cases, to two years. Most of the appointments are made by the President and Fellows of Harvard College, on nomination by the Faculty of Arts and Sciences. A few are in the hands of trustees, or require nomination or confirmation by specially designated persons.

Any fellowship, other than a teaching fellowship, or scholarship to which the holder has been recommended for appointment by the Faculty of Arts and Sciences, will ordinarily be vacated by the subsequent marriage of the holder.

Scholarships are ordinarily assigned only on the basis of a previous year of work in College. The enjoyment of a scholarship for one year will not constitute any title to a second nomination, unless the superiority for which it was originally awarded be fully maintained; and at any time a scholarship, or any portion thereof may be taken away from a student who has proved undeserving. No student who has incurred a serious College censure in the course of the year will be considered a candidate for a scholarship; nor any student who obtains leave of absence for the year in which the scholarship would be payable.

| Date of Establishment | Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|-----------------------|-------------------------------|--------------------------|--|------------------------|--|---|---|---|
| 1904 | 1 <i>Julia Anson Appleton</i> | Architecture (traveling) | \$25,000 | \$1,000 | Those who have taken S. B. with distinction or completed with distinction a year of graduate study in architecture at University | Competition. Must not be more than 30 years old | 1 year; may be re-appointed if the work is creditable | |
| 1901 | 4 <i>Edward Austin</i> | Arts and sciences | \$480,000 | 500 | Those of special fitness for advanced study in departments giving degrees of Ph.D. or S.D. | Must reside at University and must not engage in other occupation, except by special permission | 1 year; eligible for re-appointment once | |
| 1899 | 30 <i>Austin</i> (teaching) | Arts and sciences | \$480,000 income partly used for other purposes | 500 | To those competent to act as assistants or instructors in College | May devote only half of time to study or research | Employed as instructors or assistants for faculty | |
| 1905 | 1 Cercle Français | Arts and sciences | | \$600 and free tuition | Young Frenchman of proficiency in literary studies | Appointed on recommendation of French Minister of public instruction | 1 year | Expected to give assistance in French instruction and other Romance languages |
| 1903 | 1 <i>George W. Dewey</i> | History | \$5,000 | \$200 | Graduate of Harvard | Highest examination in modern history | 1 year | |

The Eighth Annual Conference

25

HARVARD UNIVERSITY—*Continued*

| 1868 | 1 <i>Harris</i> | Literature or science | \$11,000 | \$ 500 | Graduate of Harvard | Acknowledged excellence in one or more departments of literature or science; marriage disqualifies | 1 or more years | To be resident in town or vicinity | |
|------|------------------------------------|--|-----------------|--------|---|--|-----------------------------------|---|--|
| 1895 | John Harvard (No. undetermined) | Arts and sciences | Without stipend | \$ 500 | Usually student in graduate school of arts and sciences | High scholarship and promise | | To assist Peabody professor of archaeology or curator of Peabody | |
| 1891 | 1 <i>Henry H. Henshaw</i> | American archaeology and ethnology | 12,000 | 1,000 | | | | | |
| 1905 | 1 <i>Edward William Hooper</i> | Arts and sciences | 25,000 | 450 | One who needs subsidy and as a rule, must have resided 3 years at University | Uncommon ability and uncommon disposition to learn. May study abroad | 1 year; may be re-appointed twice | | |
| 1873 | 1 <i>John Thornton Kirkland</i> | Nearly at large | 11,000 | 450 | Graduates of Harvard or other institutions | May be resident or study abroad | | | |
| 1889 | Henry Lee Memorial | Political economy | 35,000 | 450 | Graduates of Harvard or other institutions | | | | |
| 1889 | Osias Goodwin Memorial | Constitutional or international law | | 450 | Graduates of Harvard or other institutions | | | | |
| 1889 | Henry Bradford Rogers Memorial | Ethics in relation to jurisprudence or sociology | | 450 | Graduates of Harvard or other institutions | | | | |
| 1902 | Charles Eliot Norton | Greek history, literature, art, archaeology, epigraphy or topography | 14,000 | 600 | Seniors of Harvard College and Graduate School of Arts and Sciences; seniors and graduate students of Radcliffe | Thesis on subject approved by committee and other accessible evidence of scholarship | 1 year | | |
| 1887 | R. T. Paine | Social science | 13,000 | 500 | One or more graduates of University | | | | |
| 1873 | 3 Parker (will dated 1841) | Arts and sciences | 50,000 | 750 | Graduates of Harvard College or any department of the University | Particular adaptation to some particular science | Not more than 3 years | Must devote himself to approved study; restricted from teaching and active business | |

The Association of American Universities

HARVARD UNIVERSITY—Continued

| Date of Establishment | Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|-----------------------|--|--|----------------|-------------------------|--|---|--|-----------------------------------|
| 1906 | Francis Parkman | Arts and sciences Architecture | \$ 10,000 | \$ 450 | 1,000 | Graduates of Harvard College | Not more than 26 years old. Same as J. A. Appleton | Devote his time to approved study |
| 1902 | Nelson Robinson, Jr. (traveling) | Arts | 32,000 | 725 | | Preference to graduates of Harvard College | Unusual gifts, attainments and characteristics. Reside at Cambridge or abroad | Must reside at South End House |
| 1869 | 2 Rogers | Study and research in political economy | | \$600 (by subscription) | | | | |
| 1900 | 1 South end | Philosophy | 11,000 | \$ 500 | Graduate of University prosecuting his studies at Cambridge or elsewhere | Proficiency in literary studies. May pursue at University of Paris those studies for which he is fitted. | Must give certain amount of instruction in English language and literature | |
| 1881 | 1 James Walker | Physics Unspecified: commonly Romance languages | 23,000 | 300 600 | Student or graduate of Harvard University | Not yet available for students in the Graduate School of Arts and Sciences | 1 year; may be resuspended (indefinitely) | |
| 1895 | 3 Whiting | American, Indian or other ethnological research Physics | 30,000 | 1,140 | Graduate or student of Harvard University | Not necessarily candidate for degree. Research may be conducted at most favorable place. Income may be divided between two students | Must furnish evidence from time to time of fidelity, proficiency, and good character | |
| 1905 | 1 Ministry of Public Instruction of French Republic | | 12,000 | 500 | | Income may be divided Various conditions | | |
| 1890 | 1 Thaw | | | | | | | |
| 1885 | 1 Tyndall scholarship (classed as fellowship) | Zoology Arts and sciences Applied sciences | cir. 350,000 | 16,375 1,250 | | | | |
| Various dates | 1 Humboldt fund 66 scholarships 7 scholarships | | | | | | | |

THE JOHNS HOPKINS UNIVERSITY

| Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|-----------------------|---|--------------------|--|---|---|---|---|
| 1 | Fellowships by courtesy. Number indeterminate | | No stipend. Fees are remitted only by special vote | Gentlemen who have been teachers in colleges or like institutions. Holders of fellowships in other colleges during residence here. Those who have been fellows here and wish to continue in residence | To candidates from anywhere | 1 year; for exceptional reasons may be re-appointed | Expected to proceed to Ph.D. degree. Such duties as are allotted to him in connection with his study. Must give evidence of work at end of year |
| 20 | University Science and literature | | \$500. ("Tuition fees \$150 must be paid) | To candidates from anywhere | Competition, but not by uniform tests. Evidence of liberal education and decided proclivity to special line of study. Must reside in Baltimore during academic year | 1 year; for exceptional reasons may be re-elected not more than twice | Devote time to study and research at place approved by President and submit written report in February |
| 1887 | 1 Adam T. Bruce | Biological science | \$10,000 | Exempt from tuition fees | Not more than 30 years old | 1 year; may be re-elected | |
| | 1 Rayner | Semitic languages | \$10,000 | Exempt from tuition fees | Preference given to those who have held fellowships in Johns Hopkins | 1 year; may be re-elected | Study and research of chosen subject. Occasionally may be required to do some teaching |
| | 3 Johnston* | | \$30,000 each | Exempt from tuition fees | Advanced students in department of Semitic languages | 1 year; re-electible | Must pursue study at Univer. unless emolument is waived; this removes this condition |
| 15 | University* | | Free tuition | To candidates from anywhere | Evidence of power of independent research. May not teach elsewhere | 1 year; re-electible | Must pursue studies exclusively at Johns Hopkins |
| 46 | Hopkins* (30 for graduates 16 for undergraduates) | | Free tuition | Graduates of this or other institutions. Resident during first three months of session | Character and intellectual promise | 1 year; re-electible | |
| | | | | Graduates from Virginia and N. Carolina; undergraduates <i>only</i> from Maryland | | | |

* The * designates scholarships.

The Association of American Universities

UNIVERSITY OF MICHIGAN

| Date of Establishment | Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Tenure | Obligations |
|-----------------------|------------------------------|----------------------|----------------|---|------------------------|--------|-------------|
| 1903 | 1 <i>Bush</i> * | Classics | | \$500; income may be divided b'tween two students | Graduate student | 1 year | |
| 1904 | 1 <i>Newberry</i> | Classics | | \$300 | Graduate student | 1 year | |
| 1905 | 1 <i>Peter White</i> | Classics | | 300 | Graduate student | 1 year | |
| 1899 | 1 <i>Peter White</i> | American history | | 400 | Graduate student | 1 year | |
| 1899 | 1 <i>Ferry</i> | Botany | | 500 | Graduate student | 1 year | |
| 1903 | 1 <i>Whittier</i> | Botany | \$4,000 | | Graduate student | 1 year | |
| 1895 | 1 <i>Stearns</i> | Pharmaceutical chem. | | \$350 | Graduate or undergrad. | 1 year | |
| 1895 | 1 <i>Park & Davis</i> | Chemistry | | 500 | Graduate student | 1 year | |
| 1901 | 1 <i>Rockefeller</i> | Bacteriology | | 350 | Graduate student | 1 year | |
| 1900 | 1 <i>Michigan Gas Assoc.</i> | Gas engineering | | 500 | Graduate student | 1 year | |
| | 1 <i>Hunt</i> (1 or more) | | | Not yet available | Graduate student | 1 year | |
| 1905 | 1 <i>Morris</i> | Philosophy | | \$350 | Graduate student | 1 year | |
| 1904 | 1 <i>Rathbone*</i> | American history | | 150 | Graduate or undergrad. | 1 year | |
| | 1 University* | Sociology | | 200 | | | |

The Eighth Annual Conference

29

UNIVERSITY OF PENNSYLVANIA

| Date of Establishment | Number of Fellowships | Subject | Awardent Capital | Income Yearly | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|-----------------------------|---|-------------|--|--------------------------------------|---|---|------------------------------|--|
| 1866—Terms modified, 1903 | 5 <i>Harrison</i> Research | 4 at large | \$500,000 for fellowships, scholarships and other purposes | \$800. No fees | Men, holders of Doctor's degree | Unusual ability in research. Must submit plans of research | Not more than three years | Devote entire time to work. May give not more than four hours per week instruction in University |
| 1902-07 | 1 Research | Assyriology | | \$800. No fees | Men, holders of Doctor's degree | Same as at large. Vacation of 2 months. Terminates Aug. 31, 1907 | May be more than three years | |
| 1896—Terms modified, 1903 | 19 in course | | | \$500. No tuition fees | Men, holding Baccalaureate degree, who have had one year of graduate work | Good reading knowledge of French and German. Laboratory and graduation fees | Not more than two years | Devote undivided time to study. No teaching or outside work allowed, unless incumbent desires and is permitted to do not more than four hours in College |
| 1885 | 1 <i>Tyndale</i> Fellowship | Physics | | \$500. No tuition fees | Men, holding Baccalaureate degree | May study abroad. Laboratory and graduation fees | Not more than three years | |
| 1900 | 1 <i>Fraser</i> Fellowship | Physics | | \$500. No tuition fees | Same as Harrison Fellowships in course. | Same as Harrison Fellowships in course. Laboratory and graduation fees | Not more than two years | Same as Harrison Fellowships in course. Must reside at University |
| 1890 | 1 <i>Bennett</i> Fellowship | At large | | \$225. No tuition fees | Women, holding Baccalaureate degree | Reading knowledge of French and German. Laboratory and graduation fees | Not more than three years | Must reside at University |
| 1892 | 1 <i>Pepper</i> Fellowship | At large | | \$225. No tuition fees | Women, holding Baccalaureate degree | Reading knowledge of French and German. Laboratory and graduation fees | Not more than three years | Must reside at University |
| 1897—Replacing scholarships | 2 <i>Moore</i> Fellowship | At large | | \$200. No tuition fees | Women, holding Baccalaureate degree | Reading knowledge of French and German. Laboratory and graduation fees | Not more than three years | Must reside at University. Must also intend to become a teacher |
| 1896—Terms modified, 1903 | 8 <i>Harrison</i> Scholarships | At large | | \$100. No tuition fees No stipend | Men, holding Baccalaureate degree | Minimum of 8 hours required. Laboratory and graduation fees | One year. Not re-eligible | Must reside at University |
| | 30 University Scholarships sometimes entitled Fellowships | At large | | | Holders of Baccalaureate degree | Minimum of 8 hours required. Laboratory and graduation fees | One year. Not re-eligible | Must reside at University |

The Association of American Universities

PRINCETON UNIVERSITY

| Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|---|--|-------------------------|--|--|--|--|---|
| UNIVERSITY | | | | Interest | Grads. of any American college of not more than 5 years standing | 1 year; may be continued for special merit | |
| 1873 J.S.K (1 or 2) | Mathematics | \$1,000 now \$16,000 | | | Records, capacity, and character Competitive examination may be held | | |
| 1 Southeast 1 Class of 1877 1 Charles 1 Scribner 1 University 1 Thaw 1 Page 1 Maule 1 Class of 1860 | Social science Biology English literature Archaeology Astronomy Classics Biology Experimental science | | \$500 400 500 400 \$10,000 10,000 10,000 10,000 | | | | |
| 1900 1901 1870 | | | | | | | |
| 1905 1 Jacobus | | 25,000 | \$1,000 | Graduate school. Highest excellence of year in graduate work. Devote himself exclusively to approved study | | | |
| 1905 1 University 1906 Free fellowships COLLEGE 1 Green | Chemistry Any department | 10,000 | Interest \$2,000 | Seniors | Competitive examination Best essay on assigned subject in philosophy and highest standing in special June examination | Not more than 3 years | Reside in Princeton. Assigned duties. Whole time to historical research |
| 1870 | | 10,000 | Interest | | | | |
| 2 Boudinot | 1 History | | \$400 | Seniors | Completion of Junior and Senior French and German and best examination | | |
| | 1 Modern languages | | | | Competitive exam. | | |
| | Biology | | | | | | |
| | English | | | | | | |
| 1 E. M. 1 Special (C. Scribner) | | | | Seniors | Senior or graduate who pursued biology at Princeton last year | | |
| | | | | 200 | Use of table at Woods Holl, Mass. \$300 | | |

The Eighth Annual Conference

31

UNIVERSITY OF VIRGINIA

| Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Condition of Appointment | Tenure | Obligations |
|----------------------------|---|---|--|--|------------------------------------|---|---|
| 3 <i>Vanderbilt</i> | Astronomy | \$7,000 | \$350+remission of fees \$210 | Advanced students taking astronomy as major. Native of Virginia | Competency and need | | Work part of time in Observatory |
| 1 <i>Mason</i> | Elective | | 5,000 | Graduate student | | | |
| 1 <i>Rives</i> | History | | 250; remission of fees 250; remission of fees | | | | Work portion of time in school from which nominated |
| 4 <i>Board of Visitors</i> | i English literature i Teutonic lang. i Romance lang. i Economic science | Annual appropriation by Board of Visitors | | | | | |
| 1 <i>McCormick*</i> | Elective | | Free tuition | Awarded by Hon. Robt. Hall McCormick | | | |
| 1 <i>Isaac Carey*</i> | Elective | 5,000 est. | \$300 approx. | Awarded by Jas. Bryan, trustee | | | |
| 1 <i>Brown*</i> | Elective | 1,500 | 90 | Awarded by founder | | | |
| 1 <i>Birely*</i> | Elective | 4,500 | 200 | Student from state of Maryland | | | |
| 1 <i>Ca'ell*</i> | English literature | 1,200 | 60 | Graduate student | | | |
| 1 <i>Miller*</i> No. 3 | Biology Chemistry Physics | | 250 each, tuition and fees not remitted | Graduation examinations | 2 yrs. | Must elect one-third of his work in biology and agriculture, analytical chemistry and applied mathematics | |

*The * designates scholarships.

The Association of American Universities

UNIVERSITY OF WISCONSIN

| Year Date Entered | Number of Fellowships | Subject | Amount Capital | Yearly Income | To Whom Open | Basis and Conditions of Appointment | Tenure | Obligations |
|-------------------------|---------------------------------|---|-------------------|------------------|---|--|-------------------------------|--|
| | 14 University | 2 Latin and Greek 2 Political economy 2 History 1 German 1 Sociology | | \$400 | Graduates of colleges of recognized standing or those of equivalent education. Men and women | | 1 year; may be re-rectd. once | Not more than 1 hour teaching a day or 2 hours laboratory. Pursue work under professor in charge of his studies Do work at University Settlement in Milwaukee |
| | 14 Honorary | | | | No stipend; Graduates of at least 1 year's standing, who have already had academic honors | | | |
| 1901 | 1 Mary M. Adams 1 Kleisch | English language and literature Bacteriology 2 Economics and political science 1 European history 1 American history 2 Engineering German Germanic philology | | \$400 | College graduates and one senior of Lawrence University, Ripon College, Milwaukee, Downer and Beloit Colleges | | | |
| | 14 University* | | | \$400 | | | | |
| | 1 Goad* | | | \$250 | Graduate students of Norwegian ancestry | | | |
| | 1 Allis* | | | 200 | Japanese students | | | |
| | 1 Wergeland* | | | 200 | | | | |
| | 1 Miller* | | | \$50 | | | | |
| | | | | | | | 4 years | |

* The * designates scholarships.

The Eighth Annual Conference

33

YALE UNIVERSITY

| Date of Establishment | Title and Number of Fellowships | Subject | Amount Capital | Present Yearly Income | Remarks |
|---|---------------------------------|------------------|----------------|-----------------------|-----------------------------------|
| OPEN ONLY TO GRADUATES OF YALE ACADEMICAL DEPARTMENT | | | | | |
| 1865 | 1 <i>Macy</i> | General | | \$ 450 | |
| 1873 | 3 <i>Foote</i> | General | | 1,000; total income | |
| 1873 | 3 <i>Douglas</i> | General | | 540 | |
| 1873 | 1 <i>Soldiers' Memorial</i> | General | | 540 | May reside in Athens |
| 1875 | 3 <i>Larned</i> | Greek | | 540 | Open to one, two, and three-year |
| 1877 | | General | | 315 each | graduates |
| 1894 | 1 <i>Scott-Harris</i> | General | | 540 | |
| 1900 | 2 <i>Eldridge</i> | General | | 540 each | |
| 1900 | 1 <i>Cuyler</i> | General | | 450 | |
| 1933 | 1 <i>Berkeley*</i> | General | | 70 | First-year graduates |
| 1824 | 1 <i>Clark*</i> | General | | 90 | First-year graduates |
| 1867 | 1 <i>DeForest*</i> | French | | 80 | First-year graduates |
| OPEN TO YALE GRADUATES OF THE ACADEMIC AND SCIENTIFIC DEPARTMENTS | | | | | |
| 1901 | 1 <i>Porter</i> | English | | \$400 | |
| 1897 | 1 <i>Eaton*</i> | Botany | | 80 | First-year graduates |
| OPEN ONLY TO GRADUATES OF SHERMAN SCIENTIFIC SCHOOL | | | | | |
| | 6 University* | General | | \$100 each | |
| OPEN TO YALE GRADUATES AND GRADUATES OF OTHER UNIVERSITIES WHO HAVE STUDIED THE SUBJECT IN THE YALE GRADUATE SCHOOL | | | | | |
| 1902 | 1 <i>Loomis</i> | Physics | | \$400 | |
| 1905 | 1 <i>H. B. Loomis</i> | Chemistry | | 400 | Competitive examination |
| | | | | | Competitive examination |
| OPEN TO GRADUATES OF ANY UNIVERSITY | | | | | |
| 1901 | 1 <i>Bulkeley</i> | American history | | \$400 | |
| | 1 <i>Robinson</i> | General | | 200 | |
| | 6 University | General | | 400 each | |
| | 1 <i>Hadley</i> | General | | 225 | To assist in publication of meri- |
| | 20 University* | General | | 100 each | torious theses. |

*The * designates scholarships.

From the above tables, supplemented at some points by other data, it appears that in the fourteen institutions of this Association which provide graduate fellowships and scholarships, over \$221,000 are annually expended upon 765 men of our 2,718 graduate students. Of this sum, so far as can be made out, \$112,000 in round numbers is from funds permanently established for this purpose by 145 outside donors and \$119,000 is appropriated from the general funds of the institutions which might any time be diverted to other uses. In Yale, Virginia, Michigan, California, the Catholic University, Harvard, and Princeton the former kind of support predominates, while at Chicago, Clark, Johns Hopkins, Cornell, and Columbia a large part of the money for fellowships is annually appropriated from general funds. The extremes are represented by institutions where fellowships are almost exclusively supported by funds given for the purpose by outside donors and by those where practically all is annually set apart from the general income of the university. It will hardly be safe to infer that at the former class of institutions, fellowships are appreciated less by the governing body than in the latter, but it certainly indicates a high appreciation of the principle of fellowships, when income that might increase salaries or facilities is diverted from that purpose to this. The criticisms that have been made upon the system do not come from this latter class of institutions. It is noteworthy that where individual donors have led the way in establishing these foundations, the institution itself has usually contributed but little, and conversely, where fellowships have been sustained by annual grants from the university funds, individuals have as yet done but little. It seems a just inference that where an institution diverts funds from salaries and other current expenses to this purpose, it profoundly believes in graduate work and in research, and that where its alumni and friends do so, that they, being pioneers, are more in earnest in this kind of work than the institution itself, which simply accepts and administers these funds upon conditions prescribed to it.

Of 232 fellowships for which this distinction can be made out, 63 are permanently attached to special departments; 36 to the humanities, and 27 to the sciences, most of these being based upon individual gifts and the greater number of those based upon university funds being open alike to all departments. Such are all but one in Chicago, Johns Hopkins, and Clark, 18 at Columbia, 48 at Harvard, and 38 at Pennsylvania. In the latter the corporation may create fellowships for one year or for a term of years. At Harvard, \$11,900 is assigned "for the present" to seven classes of appointees, most of which are open to different departments.

In fact, the sum paid each fellow varies from the extremes of \$100 for the Junior scholarship at Clark to \$2,000 which a student in architecture receives for two years at Cornell. Columbia has one fellowship of \$1,250 for a research student in any department, Harvard has one, and Pennsylvania two of \$1,000, all three in architecture. Pennsylvania has four for research in any department and one in psychology, of \$800 each. More than half of all the fellows under appointment the present year receive \$500 each, so that this is the most common stipend, although tuition is usually deducted from it.

To secure appointment, the candidate must usually apply by filling out a printed blank which requires age, academic record, degrees with dates, the department chosen, the higher degree intended, and besides this, he must file testimonials and sometimes submit specimens of his work. These blanks, however, are so diverse both in the number and kinds of questions asked and so suggestive of different practices and ideals that only an analysis too detailed for presentation here could do justice to this part of the theme. Some require a statement as to whether or not the applicant intends to teach. Much stress is often laid upon a reading knowledge of French, German, and sometimes Latin. The applicant must sometimes express his purpose to proceed to the doctorate, and sometimes appointment is reserved only for candidates for this degree. Some ask a pledge of exclusive devotion to the subject preferred, if appointed, or to refund payments already made, if work is given up before the end of the year. Some are limited to graduates of the university bestowing them. Such are 9 at Harvard, 4 at Princeton, and 16 at Yale. Most, however, are open to graduates of other institutions of good standing or, as at Cornell, of standard deemed equal to its own. Yale, Princeton, and Johns Hopkins appoint only those graduated within five years. Columbia requires the candidate to be under thirty. Chicago and Pennsylvania demand at least one year of graduate study before appointment. Scholarship and general ability are required by all. Ability in research is specified as one of the chief conditions of appointment at Chicago, Clark, Columbia, Cornell, and Pennsylvania. Competitive examination decides a few of these appointments at Harvard, Pennsylvania, Princeton, and Yale.

Who makes the appointment? Although the final appointment is made by the faculty at Clark, the Catholic University, Cornell, Pennsylvania, Princeton, and Yale, and by the trustees, regents, or governing board at Virginia, Michigan, Johns Hopkins, Harvard, and Chicago, the recommendation of the heads of departments is usually decisive. In some of the Yale fellowships, the deed of gift or bequest of the fund from which the fellowship is established, prescribes how appointments shall be made. In Pennsylvania, the executive committee of the faculty appoints and is free, at least in theory, to create any number of fellows in any one subject. In this institution it is said that providing each department with fellows does not weigh against disparity of merit, so that in fact some departments may have several fellows and others none. Health, although rarely mentioned, sometimes has weight. Appointment by a governing board or by an academic council selected from the faculty is a convenient method for deciding the delicate question of distributing the fellows among departments competing for them. There are indications of an effort in some institutions to stimulate weak or encourage strong departments by withholding from or granting to them an undue proportion of fellows.

This is probably a desideratum, but very difficult to attain. There is also no standard by which attainments of applicants in different departments can be compared. It is also difficult to deprive a department of fellows when it has plenty of applicants, because the work is not strong enough when the department is permitted to give the Doctor's degree.

It is also obviously unwise to appoint men to these positions unless they have good ability, high attainments, and give promise of useful careers in the department chosen. Hence, all methods aim to secure the men of superior power who are likely to render service. If, therefore, our educational system is effective, these picked 765 men should be regarded as future leaders in their respective fields, should receive our choicest care, and be exempted from everything that interferes with their highest intellectual development, and be given every possible stimulus and aid; for in their training the university performs the greatest service to its own future as well as to the community and the state. These men merit and best respond to personal help, and to see them grow is one of the chief pleasures and rewards of a professor's life. They belong to a radically different class from the student aided by charitable funds because he is poor and without reference to his ability, who is struggling through college or the theological seminary; to lavish aid upon whom is often a doubtful service. The distinction between these two classes was not at first recognized by some of our most eminent university leaders. It is now, however, better understood and some institutions emphasize the difference by announcing that fellowships are given without reference to pecuniary needs and that the title may be retained and the emolument waived. For the failure of the undergraduate scholarship system of aids to poor students, college authorities have been themselves to blame in so far as they have not always excluded mediocre men from appointments where they had the power to do so. The only danger that concerns the system of fellowships is that discriminations between superior and fairly good men will not be rigorously maintained in all appointments, even though some of the funds available be not used every year. In its brief history in this country, the title fellow is now the most honorable and coveted to which the student aspires. Apart from its emolument, it confers a certain dignity and distinction. It is to be feared, however, that in some quarters tendencies are already apparent which may impair the dignity and distinction of this highest student honor.

Turning now to the responsibilities of fellows, we find here, too, great difference of practice and theory. Residence throughout the year is the most uniform requirement, and the few traveling fellows must file reports at stated intervals. Fellows must enter upon no remunerative outside occupation but give chief attention to work in their chosen field. The Catholic University apparently requires teaching of all its fellows. Chicago calls for one-sixth of the time in teaching, examinations, library, and other work. Columbia does not require teaching, save to fill temporary vacancies and to do minor work of instruction, a fellowship being usually considered a guarantee of leisure to do advanced work. Clark exempts from all duties. At Harvard, 30 of the \$500 fellowships are teaching fellowships and one-half of the appointee's time is given to the university. At the Johns Hopkins, fellows rarely teach but on emergencies and may assist at examinations. At Pennsylvania, fellows may be required to teach not exceeding five hours a week in graduate subjects and are allowed to teach four hours a week in undergraduate subjects to test them for possible later appointments in the university. At Princeton, fellows are often permitted to teach a

little, but the university is abandoning this requirement as fast as possible. Wisconsin requires one hour of teaching or two hours in the laboratory daily, with specific duties assigned by the president after consultation with the heads of departments. Required service should never exceed one-fourth of the student's working time, unless by the student's request. At Yale, most fellows render reasonable assistance. In other institutions, either nothing is said or exemption from duties is specified. There can be no doubt that a little teaching in the subject in which a fellow specializes and in which he is ultimately to earn his bread by teaching is a very useful part of his professional training, although if he is absorbed in research he can do very little of this without seriously affecting his efficiency as an investigator. My own opinion is clear that the 30 Harvard fellows, who, for \$500, minus the tuition fee of \$150, or for \$350, devote half their time, not to teaching of the kind they will be required to do later in life, but to the drudgery of marking hundreds of examination papers and correcting themes should not be called fellows and should not be permitted to do such work. It is said, doubtless truly, that they are eager for these appointments, but to my mind, it would be hard to differentiate their situation from that of those who work under a sweating system. They are paid in honor for a service, no small part of which is a waste of time for them, because it has little educational value. Such work is the product of a mechanical system of education too common in this country; and to induce elite young men in their very best years and with the best opportunities for advance in knowledge and power to work half a year for \$350 and pay \$150, which is a full year's tuition, for what they receive during the remaining half-year is an injustice that, while it has parallels in the oppression of labor by capital, is essentially unfair, not only to its victims, but to rival institutions that are ready to do better by these young men. It is not pleasant to imagine that an academic walking delegate, if there were such honestly intent upon the highest degree of equity between employer and employee, might say of such work thus exacted and thus paid: Are these young men teachers? Would they willingly examine and mark the vast areas of papers, save under the charm that the term fellow in a magnificent institution has now come to bear for undergraduates? Does this not tend to degrade the term and the function?

The date of application ranges from March 1 to May 1, and of appointment from April 1 to Commencement or even July 1. This interval between appointments in different institutions enables candidates, after learning the results of their applications in one institution, if unsuccessful, to apply at another. A few seek appointments at several institutions at once and, if successful in more than one, accept the best and may decline, even after accepting, a smaller in favor of a better later appointment. If reproached as selling themselves to the highest bidder, the justification is pecuniary necessity together with a burning desire for knowledge, both of which are often true. So strong is the belief in these new appointments now offered by universities and in the efficiency of their agencies for securing good positions for those who have been fellows that occasionally men of mature years with families leave assured positions which they have filled well, in the hope of bettering themselves; and perhaps more, though still a few, drift for years from one institution to another in the hope and

occasional fruition of fellowships, perhaps seeking degrees they can never quite attain and endorsements for positions they are not quite fit for. Few as these are, they are doubtless known to us all; and let the institution in our midst that is without sin in occasionally allowing such drifters to become fellows cast the first stone.

As to the length of appointments, most, except traveling fellowships, are for one year and are renewable at least once. In Harvard most may be renewed twice, but usually are renewed only once. In Pennsylvania, twenty-five can be held but one and six but three years. In Yale, most fellows may be reappointed twice and, in rare cases, three times.

As to the relation of fellows to the Doctor's degree, those who have taken the latter are usually not eligible to fellowships. Fellows must be candidates for the Doctor's degree at Clark, Johns Hopkins, and Yale, and are supposed to be at Michigan, but this, although preferred, is not always necessary at Columbia or Harvard, and other colleges say nothing about it.

As to the effects of marriage, there are few data. Harvard prefers celibacy, and marriage during incumbency forfeits appointment. My own impression, confirmed by that of others, is that as a rule, newly married men are somewhat less efficient and plastic, and that the first year of married life is liable to involve distinct reduction in the power of work.

Provision for honorary fellows is made at six of our universities. They are usually assigned to older men or those who have a Doctor's degree. Appointment in all cases remits fees, but pays no stipend, although at the Johns Hopkins, fellowship by courtesy is chiefly on honorary appointment but does not remit fees, save by special vote. In the above six institutions there were last year 54 honorary fellows.

Last year, 28 fellowships in all were held by women graduates, Chicago leading with 12. Of these 28, all but 4 were in the humanities. In Chicago, Cornell, and Clark, apparently all the fellowships are open to women on equal terms. Very few, however, win them. Clark has never had but two or three from the first.

The fellowship system itself, as is seen by the dates of these foundations, is of recent origin and was given its chief momentum in the initial plans of the Johns Hopkins University, which deserves peculiar credit in this field. Not only it, but Clark and Chicago followed its plan of appropriating income for this purpose, so that this method is for the most part restricted to the newer institutions. There can be little doubt that such funds will increase for this purpose ought to be attractive and should be encouraged till every graduate who wishes to go on in science, letters, or art, and who has ability that promises to advance knowledge or render scientific service to the community, is able to prepare himself for his work which requires even greater time and more effort as civilization and knowledge advance under the most favorable conditions. These all too meager outlines show that our American system of fellowships has features not found in other countries.

THE APPOINTMENT AND OBLIGATIONS OF UNIVERSITY FELLOWS

PAPER PRESENTED ON BEHALF OF THE UNIVERSITY OF WISCONSIN BY
PROFESSOR GEORGE C. COMSTOCK

Although a somewhat remarkable dearth of pertinent literature renders the university fellowship a promising field for the essayist or historian, it is not the intention in the present paper to enter upon any exploitation of that field. Rather is it the writer's purpose to confine himself in the main to certain minor features of the case suggested by immediate problems of university administration, and to regard its larger aspects only as a background with which his treatment of details must be made to harmonize.

Widely different as they are at the present time, the English and the American graduate fellowship are lineal descendants from the same ancestry, a meager pecuniary provision for the temporary support of young men destined to the service of the Church. Although the English fellowship, as early as the Elizabethan period, showed distinct traces of veering toward its present status of an estate for years, if not for life, the American foundation still adheres to and emphasizes the temporary character of this assistance, but substitutes scholarship, or, more narrowly, the profession of teaching, in place of the Church, as the ultimate beneficiary. Usually the American fellow is a novice in the guild of professors, and is here to be so considered in respect of his appointment and obligations.

I am not oblivious of the part fellowships play as university honors, distinctions conferred in recognition of high scholarship; nor do I overlook their use as an instrument for the upbuilding of graduate schools, but these seem, upon the whole, collateral utilities, and from the standpoint of donor and recipient alike, the fellowship stands, in the main, for opportunity, the entrance into the professorial rank and the stepping-stone to the professor's chair.

The obligations of the youth who accepts and enjoys such a position, are briefly summarized in a single word—loyalty; loyalty to the particular foundation of which one is the incumbent, loyalty to the institution in which he is placed, loyalty to the purpose for which fellowships exist—the promotion of higher scholarship and the training-up of men efficient for a peculiar kind of service to the community.

We need not here insist upon the obligation of the fellow to discharge the scholastic duties of his calling in ampler measure and with more punctilious heed than do his unbefriended comrades. The obligation is well recognized, and while, perchance, not every institution would follow the drastic law announced by some, and remove from office the fellow found derelict in these respects, there are assuredly none among us who would continue him in his position beyond a single term.

Whether the incumbent of a fellowship should be called upon to render current service to the institution with which he is connected, is a question which hardly admits a categorical answer. There exist among us private foundations in which such service is precluded by express terms of the grant itself. There exist also foundations, commonly

called university fellowships, in which the obligation to render service is expressly stipulated and in which the stipend is supposed to be adjusted with greater or less nicety to the amount and character of that service. These diverse cases, together with those intermediate between them, obviously cannot be brought under a single rule or measure of obligation. We may inquire, however, what should be the normal attitude of a university toward its fellowships, prospective as well as present, in the matter of service. Shall such service be usually required and exemption therefrom be granted only in such exceptional cases as cannot be brought within the general rule, e. g., a traveling fellowship or one whose character is fixed by the terms of a private grant, or, ought exemption to be the rule and service be required only under the stress of necessity, as where public funds are applied to this purpose by a state university. Individual answers to the question thus raised will doubtless depend in great measure upon the individual concept of the immediate purpose to be attained. Are fellowships designed for the culture of the holder, the enlargement of his intellectual possibilities, the development of his taste and appreciation of the best things in life? If so, it may, perchance, seem that temporary relief from the routine of humdrum duties is expedient, in order that talented youth may, with singleness of purpose, devote one or more years wholly to the attainment of culture. On the other hand, if the end in view is conceived as service to the community, especial training for larger service than would otherwise be rendered, it may well be maintained that the recipient of special favors should be placed at once in the position of making some return for them; a return that shall be, in itself, of immediate benefit to the university that receives it and of disciplinary value to him who renders it—such as elementary instructional work or participation in the investigations of the department with which he is connected. It may even be maintained that the rendition of current service of this character constitutes in itself a large factor in the fellow's mental attitude, removing him from a purely eleemosynary relation, to the manlier position of enjoying the fruits of his own labor.

The writer confesses some sympathy with both of these views, and perhaps it is well that both should obtain among us and that there should exist fellowships both with and without service. But in the main, the conception of training men for service rather than for personal culture, seems the worthier, the more consonant with educational ideals. The daily task, if properly adjusted, may be made ballast rather than burden. It may be made to force upon the fellow new points of view, new relations to his subject-matter, and, upon the whole, it seems to the writer best that, in most cases, the *habendum* of a fellowship should be associated with a *reddendum* of service.

At the University of Wisconsin, holders of university fellowships are required to render such service as may be assigned them by the president of the university in consultation with the head of the department in which the fellow's major study lies, and the work assigned may be equivalent to one hour of teaching daily or the supervision of laboratory work for two hours daily; and, in spite of considerable variety of statement, it is believed that this is not far from the average requirement in other institutions where service is

exacted. The holders of privately supported fellowships at Wisconsin are, for the most part, exempt from such service, and an interesting question for the future will be a quantitative determination of the cultural advantage accruing to the fellow thus exempt. Adequate data for the determination of the matter are not now available, but the prevailing university opinion at Wisconsin is that the requirement of service, up to the limit above indicated, is not a substantial burden to the student and that, entirely apart from his stipend, he gains more than he loses thereby.

This collateral gain to the student is obviously dependent upon the character of the work assigned him, which, if of a routine pedagogical character, should fall so well within his competence as to impose no severe burden of preparation for its daily discharge. So too, the service, if of a routine character, should obviously be rendered to the university and not to an individual professor for his own behoof. When the fellow's duties are assigned in aid of research in progress within the university, the line of demarkation between private and public benefit becomes obscure, and there may be occasional complaint of the undue amount or mechanical character of the service exacted. Good university administration will provide some safeguards at this point, but such cases are obviously of exceptional character and of easy remedy should they exist. In general, when the assigned research duties of a fellow are of such character as to demand and test his previously acquired professional and technical knowledge and skill, they may constitute the most valuable part of his training. The best illustration of work of this kind known to the writer is to be found in the practice of the University of California with respect to certain fellowships in astronomy, where the fellows are, for half a year or more, assigned to observatory duty as assistants. I believe it is an unknown event for any incumbent to look upon such assignment otherwise than as the best part of his fellowship, presenting advantages that could not be compassed in any other way. It is worth inquiry whether similar allotments of duty may not be elsewhere feasible, and may not present substantial attractions, even to students not bound to render service.

In the absence of extraneous controlling circumstances, such as the express terms of a grant, it is the writer's judgment that the holder of a fellowship should not be put in a purely eleemosynary relation to his university, and that he should not be encouraged to think of himself as occupying the position of one paid to study. I have heard a commissioner of education of the United States describe a certain American university as "hiring students for its graduate work," and indeed the phrase seems to have found place in the deliberations of this association. But whatever element of truth may be contained in the statement is one that should be minimized, and if possible obliterated, rather than encouraged and enlarged. I do not believe that the mercenary spirit thus alleged to exist has found extensive lodgment in the student mind. Even in the midst of a commercial age the university fellow is, in spirit, not far different from his predecessor of the fourteenth century, who

The Association of American Universities

was levere have at his beddes heed
 Twenty bokes clad in blak or reed,
 Of Aristotle and his philosophye,
 Than robes riche or fithele or gay sawtrye.

One who had

but little gold in cofre,
 But al that he mighete of his frendes hente
 On bokes and on lerninge he it spente,
 And bisily gan for the soules preye
 Of hem that yaf him wher-with to scoleyne.

May the day be far distant when Chaucer's scholastic ideals shall have altogether disappeared from our universities, but indubitably his lines ring false to modern ears if considered as an exposition of the obligations of a university fellow. The idea of usefulness, of service to the community, has been superadded to that of erudition and personal culture, and from this point of view also it seems expedient that our universities should emphasize and insist upon the rendering of such service from the very beginning of a salaried career.

With regard to the appointment of fellows, it may be assumed that, while the formal appointment to office will be made by the body having control of the university budget, the actual choice of individuals will, for the most part, fall to a university faculty, or an equivalent body of the same general character, e. g., a department or a committee. The method by which this body shall proceed to a choice is best determined by each institution for itself. It does not seem desirable or feasible to prescribe general rules in this matter. But in one minor respect the case presents itself under a somewhat different aspect, which it is the province of this paper to discuss.

Under normal conditions the graduate fellowship is the object of keen competition, largely sought by students of the best class, and presenting to the institution in which it is offered a value and utility that are fairly measured by the demand that it excites. In the common university practice, through some suitable method, a choice is made among the applicants for each position to be filled, the successful John Doe is advised of and accepts the appointment to a fellowship for the ensuing year, and the unsuccessful candidates disperse and are lost to view. If John Doe keeps the engagement into which he has thus entered—and usually he does keep it—well and good. But cases are by no means unknown in which he proves recreant to the trust reposed in him, and after a lapse of some weeks or months, announces, without apparent embarrassment or shame, that, having found a more desirable position elsewhere, he surrenders his appointment and withdraws from the fellowship he had expected to fill. The embarrassment in the case devolves upon the university which, through its relations with John Doe, has lost the opportunity of filling its fellowship from the excellent material available at the time of the original

appointment, and which must now base its election upon a restricted choice among applicants from whom the best have already been culled.

That the case here represented is not an uncommon one is shown by the frank statement made by one university here represented, that a supplemental election to fill vacancies thus caused will be held at the opening of each academic year, and by the practice of Columbia, Pennsylvania, and perhaps other institutions, in exacting, as a condition precedent to appointment, a formal pledge that the applicant will not resign his fellowship to accept a similar position elsewhere.

It is, of course, open to every institution to adopt, for its own protection, a similar circumspect procedure, and suggestions of this kind have hitherto been presented to this association, an extreme form being that every candidate, at the time of making application for such an appointment, shall declare that he has not made and will not make a similar application to any other university. This appears to the writer objectionable from at least two points of view. It takes no heed of withdrawal for purposes other than the acceptance of another fellowship, although they are equally embarrassing and in their ethics equally objectionable with the class of cases specifically considered in the proposition; and, the proposed remedy appears to the writer an undue infringement of student rights and opportunities. It is not apparent why a more stringent rule of limitations should be applied to the prospective fellow than to the prospective professor, who, by common consent, may simultaneously consider or seek many positions, subject only to the moral obligation of abiding by his promise, when made, to accept a particular one of them. The especially able candidate, whom two or more institutions may desire to elect to a fellowship, seems entitled to the benefit of his talents and reputation, and the possible inconvenience of a double election should be avoided by methods that will not encroach upon the proper liberties of the student.

A possible resource in the matter is the establishment of a central bureau, to which the several universities concerned shall report their election of fellows when made, and from which there should be certified back to the universities the names of the several candidates free to accept their appointments; cases of duplicate election being adjusted in this bureau either in accordance with the candidate's expressed order of preference, or by some such impartial method as the drawing of lots. But the machinery thus suggested seems cumbrous, and it is doubtful if its workings would commend themselves to any large number of institutions.

A far more satisfactory solution of the difficulties would be found in the existence and application of an ethical principle, recognized alike by candidates and by appointing bodies, that withdrawal from a fellowship otherwise than by the terms of the appointment itself, or by the consent of both parties thereto, is a breach of faith that should permanently bar the culprit from similar appointment elsewhere. It must be confessed that this principle, if extant at the present time as a rule of conduct, is in a rudimentary state and, pend-

ing development into greater vigor, requires some supplementary measures for its temporary enforcement. One such measure—a mechanical detail of procedure—lies well within the reach of this association, viz., the agreement upon a uniform date of election to fellowships. At the present time, while such elections are usually held in the spring, a considerable diversity of date exists among the institutions here represented, and it is sufficiently apparent that if the candidate who in March has accepted election to a fellowship in the XYZ College, vacates it in May to ally himself with the ABC University, the prejudice suffered by the former institution is materially enhanced by the intervening months of delay. It is proposed that, as a measure of comity between the universities of this association, they agree upon a simultaneous, or nearly simultaneous, election to graduate fellowships and scholarships, and the second week in April is suggested as corresponding approximately to the average practice at the present time. It is further proposed that, immediately following such election, mimeographed sheets be prepared by each university, showing the names of all persons elected to graduate fellowships or scholarships, and that a copy of these sheets be mailed to each university co-operating in the scheme, for its information with regard to any cases of duplicate election that may occur. Each university should be left free to deal in its own way with such cases of duplication as affect it, early information of the fact being in itself a substantial amelioration of the evils of the case, and a complete remedy being immediately available along lines that will readily suggest themselves in each specific case.

As is above indicated, the two administrative details here suggested—simultaneous election and prompt exchange of results—are to be regarded only as mechanical auxiliaries to a declared principle of academic comity that the fellow or scholar who abandons his appointment for reasons not satisfactory to the institution that has conferred it is thereby as effectually barred from similar appointment elsewhere as he would be barred from all university privileges by a sentence of dishonorable dismissal.

DISCUSSION OF THE APPOINTMENT AND OBLIGATIONS OF GRADUATE FELLOWS

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. CARPENTER: There has developed in late years a system of shopping for fellowships. I have known the same student to apply at Chicago, at Columbia, and at Pennsylvania, the three dates for election allowing that method of procedure. Of course, the attitude of the applicant may be perfectly reasonable and rational, but I am afraid the thing also has an evil side. I have often wondered if it hadn't developed really a system of bargain hunting, and I think this suggestion to make a simultaneous date of election extremely valuable and important. It does not seem to me that there is anything else needed at the present time. Our fellowships play a very great rôle in graduate work. I appreciate from President Hall's paper how utterly impossible it is to make general statements of fellowship conditions in our institutions at the present time. There is no common terminology.

MR. REMSEN: We received two years ago \$90,000, the income of which was to be used for three "scholarships." We were therefore prevented from calling them fellowships, and yet they are the highest fellowships we have. We cannot be very rigid in this matter of terminology, especially where donors are specific in the language they use. I shall not speak at length on this subject, of which my mind and heart are both full. I like the suggestion of having a common date for election, though I do not know that it would affect us very much, for we require that those who are elected to fellowships should have been connected with our own university one year. In nearly every case where we have elected a man not known to us personally we have been disappointed. We cannot judge of their qualities and powers without that contact. It is an unwritten law, which we are not obliged to follow, but very rarely do we act in any other way. My own opinion, which I will state with as much emphasis as possible, is that the fellowship is greatly overdone business in this country.

MR. COMSTOCK: At Wisconsin, a scholarship is in effect a junior fellowship, carrying a much smaller stipend, \$250 as against \$400. But we count it a valuable asset of our graduate school. President Hall has been misled by use of the term into an omission from his list of statistics; the fault is quite as much ours as his, in that we have deviated from his terminology.

One other point I would like to correct. The state, while it does not appropriate money for fellowships, does appropriate money to the university, and the regents of the university re-appropriate money for the purpose of paying fellowships.

MR. SMALL: I have been surprised at the indication that there are evils in the knowledge of the gentlemen who prepared these papers that have not come seriously to my attention. Apparently Chicago is one of the four institutions which deals with the largest fellowship sums, and the evils are said to be connected with those that have those largest sums. Now it has never seemed to me that the evils hinted at are in any appreciable degree connected with our experience. I have been surprised, also, by President Remsen's emphasis. It has not impressed us that the facts are of that sort.

Our practice is to assign the fellowship funds to our twenty-six departments in proportion to the ratio of graduate registration. The department may then divide its allotment sum as it pleases. Now, the number of candidates makes it necessary to select among a dozen of almost equally promising students. We have not been conscious that we were either directly or indirectly entering into anything of the nature of a bargain-counter matter. We have, indeed, very frequently known that applicants for our fellowships were applicants for other fellowships, and we have encouraged them. We have lent our assistance to students to go to universities stronger in certain departments than our own. I wish these evils might be spoken of a little more directly.

MR. WOODWARD: I would like first to take this opportunity to express my appreciation of the honor which this organization has shown me, and the institution which I represent, in asking me to meet with you. I am much interested in this question. I have had a considerable amount of experience in such matters at Columbia University, and there is a strong tendency to urge the Carnegie Institution of Washington to graft upon it a similar system. Thus far it does not seem advisable for us to attach to our institution any such system of assistance. We have, however, tried two systems of aid which are somewhat similar to scholarships and fellowships: what we call "small grants" made to individuals and also a system of what was very unhappily called "research assistanceships." A research assistant in our Institution is a young man or woman of

promise, who is set at work at some investigation quite free from any instruction. Of a very considerable number of appointees only about one in seven has produced anything which the Institution would regard as worthy of publication. It should be understood I am not speaking on behalf of the Institution—and I would like to remark parenthetically that I commend very highly your conservatism which has prevented you from asking the Institution from becoming a member of your body. It is much easier for us, also, to deal with individuals than with institutions.

It seems to me a research institution should not deal at all with any system of small grants and research assistanceships similar to scholarships and fellowships; that we should give our grants, although they may be small, only to investigators who have demonstrated to us that they can do something. We ought not to enter the field of educational institutions. I shall be glad if in your deliberations concerning these matters you will kindly give me your advice on that point. Personally, and so far as the Institution is represented by me, I think we should keep out of the business of scholarships and fellowships.

MR. HASKINS: My experience concerning the practice of assigning teaching duties to fellows, both at Wisconsin and Harvard, has been that it is on the whole a good thing; on various occasions I have had opportunity to give students a choice between the two kinds of fellowships, and in most cases students have preferred the teaching fellowship, assuming that the amount of remuneration is the same. They have preferred the experience, and the pleasant work which that carries with it, to the complete freedom of their own time. I do not believe there should be any absolute system. In each institution there should be fellowships which carry with them no obligations for teaching, for there are men who have capacities for research whom it ought to be possible to appoint without tying them down and also tying students down to having those particular people teach them. On the other hand it ought to be possible to give a considerable number of our fellows the opportunity to give real instruction, not simply the reading of papers, but real apprentice work. The more mature students are very glad to do teaching in conjunction with a professor who is conducting the kind of courses which they themselves hope afterward to give.

I think we must admit on the whole that the fellowship is an obstacle to university migration, largely for the reason which President Remsen states, that we ordinarily prefer to appoint a man on the ground. A student will stay at the institution where he has a hope of getting a fellowship, rather than go where he knows the opportunities are better, but where he thinks it unlikely that he will receive one.

As regards the difference between fellowships and scholarships, it is perfectly true that donors choose curious names. Ordinarily the difference is one of degree. The scholarship may go from tuition to two or three hundred dollars, but it is a lower grade than a fellowship. May not the universities in this Association, however, lay down the principle that so far as fellowships and scholarships are created by the universities themselves, they should observe the distinction between a fellowship and scholarship, and not lower the value and honor which a fellowship ought to carry?

Mr. VAN HISE: I would carry that suggestion one step further, and make the amount on which the statement is based a net amount. As illustrating the situation we may take one member of this Association, where these appointments are called fellowships from the point where tuition is remitted to the net amount of \$400. At Wisconsin, on the other hand, university scholar-

ships have a net amount of not less than \$200, and fellowships have a net amount varying from \$370 to \$500. Statistics made up on such entirely different bases are very misleading.

MR. SMALL: That makes the financial test the criterion of honor. We claim that every man who is of sufficient promise ought to be honored by an appointment, whether we have the money to give him \$520 or not. The distinction we make is between fellows and scholars. The amount of a fellowship is a matter that is immaterial in fixing their standing.

MR. ELIOT: The whole business of scholarships and fellowships is an experimental business in our country, and what we need is a large variety of intelligent experimentation. We have before us the warning of the demoralization of the clerical profession through the method of beneficiary aid. And we see already in the administration of fellowships in particular that the same evil is beginning to infest our graduate schools. There is no question that the average ability of the young man drawn into our graduate schools is not what we wish in comparison with that of the men going into the profession of law or medicine. That is a subject of very wide interest, but it will take a good many years to work it out to a safe conclusion; and I think we ought not to aim at uniformity in the different institutions or at uniformity of administration in any single institution. Here at Harvard we are trying certainly half a dozen different experiments. We differ among ourselves as to which is the best experiment. Personally I think the best experiment we have in hand is the teaching fellowship, but other opinions would be expressed if other members of our faculty were present.

I agree with what President Woodward said about the importance of keeping out of the Carnegie Institution all these questions of scholarships and fellowships. I think the Institution can make better use of its resources.

The greatest service you can render a young man who aspires to be a scientist or a teacher, is to keep him a year or two in contact with a leading mind in his chosen field of study. Perhaps you can get him into that contact by making him an assistant better than by making him a fellow; that seems on the whole to be the choice of the most ambitious young men here, and it seems to me that they are wise. In Germany, in Prussia at least, they require that what we call a research professor should have so many permanent assistants and so many temporary assistants, and that he shall shift all his temporary assistants every year. Of course the object of that is to bring five, six, seven, or eight young students into contact with that professor's mind and methods every year.

[*In reply to a question*]: We have had good experience with our traveling fellowships, and not only in producing teachers. We find we are training physicians, surgeons, architects, landscape architects, engineers, men for business, in short a large variety, through fellowships, and this variety we think is a wholesome result.

One other point might be mentioned, the distinction between an institution which has no tuition fee, and one with a large fee. For instance, we apparently have a large amount of money devoted to scholarships here. But those scholarships do not average more than \$215, perhaps rather lower than that, and the institution itself takes for purposes of instruction \$150 out of the \$215 or less. So that the money really applicable to the youth's expenses, for books, etc., is a small sum. Therefore when we get an endowment for ten scholarships we know we are going to reinforce our income devoted to instruction by \$1,500 a year. That is quite a different situation from the situation of a state university.

SECOND SESSION

THE EXEMPTION OF EDUCATIONAL INSTITUTIONS FROM TAXATION

ADDRESS ON BEHALF OF HARVARD UNIVERSITY BY PRESIDENT
CHARLES W. ELIOT

Mr. President, we have had in Massachusetts for the last forty years four attacks on the exemption of colleges, charities, and religious institutions from taxation. The first attack took its rise in a demand among religious bodies for the taxation of churches. The Methodist church, for example, was advocating the taxation of churches in order that the large properties held by the Catholic church might be got at, and their holdings restricted. We have been through two movements since, originating in the legislature, which were more mixed than that was in its inception. Both were defeated. The fourth and last one, which began a year ago, is an attack directed at only three features of the exemption in colleges or seminaries. They have abandoned the attack on the churches, hospitals, infirmaries, and asylums, and have confined themselves to three subjects in regard to colleges and schools—dormitories, dining halls, and professors' houses (including, of course, the president's house). The advocates of this measure are divisible into two classes. They are in the first place men who object to the exemption because it is an indirect aid to institutions over which the state may have no control, and generally has but a limited control. Now that class of advocates has a pretty logical position, a position which can be defended. They, of course, believe that of the two ways of supporting the higher educational institutions which I mention in this pamphlet,¹ the way by direct government support is far the best and wisest in all respects. Another class of advocates for the taxation of colleges and schools believes that the state may rightly aid such institutions, although it has not much share in their government, but that it should give the aid itself, and not make the unfortunate community in which the exempted institution is situated give all the aid. This has been called a question of the incidence of taxation. The state may rightly aid Harvard University, but it has no business to make Cambridge give all the aid. These advocates, of course, claim that there is a burden on the town in which an exempted institution is situated which results from the presence of that institution. Having occasion to address the Recess Committee on Taxation, I made the speech which is printed in this pamphlet, to show that there is no burden on the town or state which harbors an exempted institution, be it church, or college, or academy; and that I believe to be demonstrated, not in the speech itself, but in the tables which I have annexed in the Appendix.²

The important thing to be observed in discussing with the public or with the legislature

¹ *Remarks of President Eliot of Harvard University before the Recess Committee on Taxation, Massachusetts Legislature, October 23, 1906, with an Appendix containing some extracts from public documents. Copies may be had upon application to the Secretary of the Corporation, Harvard University.*

² These tables are reprinted herewith, pp. 107-11.

this question of exemption is to convince the people that there is no burden in the presence of the exempted institution, but on the contrary, that many advantages result to the towns or cities which harbor them. For example, increase of taxable values. Here is a corner lot on Massachusetts Avenue; the owners had no idea it was worth \$3 a foot, but one of the college societies here, a rich society with rich graduates, authorized its officers to buy this particular corner lot at a price not exceeding \$10 a foot. The owner of the property was unwilling to sell his lot and therefore he named a price which he thought entirely prohibitive; but he unfortunately named ten dollars, whereupon the representative of the society instantly bought it. The effect of that single sale advanced the valuation of exempted property in Cambridge very much, and that of taxable property also. When the advocates of taxation of exempted property urge the enormous total amounts of exempted property in any of our states, towns, or cities, it is important to inquire how the valuations of those exempted properties are arrived at.

We have no reason to regret the presence of great masses of exempted property in our cities and towns; on the contrary, the things exempted are just the things that make it worth while to live in Massachusetts at all. The more exemptions we can get the better, the more reservations from taxation the better. We have been unfortunate in Massachusetts in regard to the presentation of this subject to the courts and to the legislature from the lack of co-operation among the different institutions. The very people who are interested in the exempted institution did not themselves understand what the grounds of such exemptions are; and further, they have been willing in several of our Massachusetts institutions to make special bargains with the assessors which impaired the force of the reasoning which supports the exemption. Such illogical concessions made by institutions exempted are extremely injurious. I want to mention particularly in this meeting the importance of a common understanding on this subject, and a common pursuit of the same general aims.

THE EXEMPTION OF EDUCATIONAL INSTITUTIONS FROM TAXATION

PAPER PRESENTED ON BEHALF OF THE UNIVERSITY OF VIRGINIA BY
PROFESSOR THOMAS W. PAGE

I have taken it for granted that the discussion is limited to non-state institutions. So far as I know, all institutions that are owned by the state and controlled by the state are exempted from taxation. I have not, therefore, made any particular inquiries with regard to the merits of the question of exemption and the principles that should apply in connection particularly with state institutions.

Among the great natural divisions of the United States the practice in regard to exempting educational institutions from taxation has grown to be fairly uniform during the present generation. Within each of these divisions, indeed, local differences occur. In some

states there are institutions that, though they are not owned nor controlled by the state, yet have so commended themselves to the public as to win special favor in the matter of taxes. From state to state, also, not only special laws, but the general laws as well that regulate exemptions, display marked differences, but these differences are confined within state borders, and are not characteristic of wider regions.

This has not always been the case. The time has been when public aid in all its forms was more generously given to education in the North and Northwest than elsewhere. At present, however, the practice of remitting taxes to educational institutions in the southern and southwestern states is similar in the main to the practice prevailing in the North. Where there is a difference, it usually takes the form of greater liberality in the South, and for more than a generation the tendency in that region has been toward an extension rather than a restriction of exemptions. This is due partly to a desire of those in authority to assist the cause of education, and partly to the poverty of southern educational institutions, a poverty so great that, with rare exceptions, their exemption from taxation is hardly noticeable in the state budgets.

The foremost representative of this tendency is Kentucky. The law in that state, it is true, differs little in terms from the law in other states, inasmuch as it provides for the exemption of institutions that are not managed for gain and whose incomes are wholly devoted to education. But the courts have been so liberal in interpreting this law that even private academies pay no taxes when the owners are willing to say, as they generally can say, that they derive no profit from them. This extreme of liberality is not equaled elsewhere, though several states closely approach it. In Tennessee, for instance, the law exempts colleges from taxes on their buildings and grounds, including vacant lots, and on income-bringing investments so long as the income is used for college purposes. To this there is an exception in the case of property used to conduct what the law calls a "secular" business, competing with a like business in private hands. It is said that the exception was intended to apply to religious publishing houses, but it has unsettled the practice with regard to the denominational colleges. Thus while Vanderbilt University is exempt on her buildings rented out as offices and flats, certain similar property is still taxed that belongs to the University of the South. In West Virginia, Mississippi, Arkansas, and Florida the law and its interpretation by the courts display an almost equal liberality. In Missouri alone it is possible to trace a slight retrograde tendency. The older institutions of that state, some seven or eight in number, obtained under their charters exemption from taxation on all their property; but the later charters, issued since the passage of the present general corporation law, have not been so liberal, and the institutions receiving them must submit to have all their revenue-producing property assessed and taxed like that of other corporations. This change of policy, however, leaves Missouri still as liberal as most of the states that border on the Atlantic and the Gulf. Virginia, the Carolinas, Alabama, and Texas exempt colleges and universities from taxation on such of their property as is used exclusively for educational purposes and on a part of that used for securing

an income provided it is not real estate. Louisiana goes a little farther in allowing Tulane to acquire and hold free of taxation income-producing property to the amount of \$5,000,000. Of all the southern states Georgia has proved in this matter the least generous. Her constitution gives power to the legislature to free from taxation such institutions of learning as are not conducted for private or corporate gain; but though a bill to that end has been twice introduced within a decade, it has failed to pass, and the denominational colleges are still taxed. This is said to be due partly to the opposition of the localities where the colleges own real estate, and partly to hostility to the Roman Catholic church, a hostility that is turned against the measure by the fact that college property and church property are usually coupled together in the same proposals for exemption.

In brief all the states of the South and Southwest except Georgia exempt from taxation such property of chartered colleges and universities as is used directly and exclusively for the work of education, accompanying the exemption with a proviso, sometimes weakly enforced, that it shall not apply to institutions conducted for gain. Several of them, however, do not exempt revenue-producing property of any kind that can be reached by the assessors; and nearly all of them tax such property when it is in the form of real estate. The main features of this policy reappear, I believe, in all other regions of the Union.

Except in the case of particular institutions it does not seem that this subject has attracted widespread attention anywhere in the United States. Here and there some discussion has grown out of litigation arising from conflicting interpretations of legal provisions or charter privileges; but for the most part this discussion has been limited to the meaning of existing laws, and has seldom been extended to the principles involved in them. A study of these laws shows that American legislators believe education, like religion, to be necessary to public welfare; but it shows that they also believe it possible so to conduct an educational institution that it will yield a profit to the owners. Furthermore, it shows that most of them believe that the ownership by educational institutions of revenue-producing property, particularly when it takes the form of real estate, either raises them above the necessity of exemption or opens the way for abuses that may overbalance the benefits they confer.

Such opinions diverge widely from those held by most of us who are actually engaged in the work of education. We do not perhaps estimate the benefit of education to society more highly than do the lawmakers, but we know that when properly conducted it not only yields no profit, but is not even self-supporting. We know, also, that efforts to tax college property that is not used "directly and exclusively" for educational purposes causes confusion and injustice. For are not the houses occupied by college professors and the dormitories that shelter the students used for educational purposes as directly and exclusively as the furnace that heats the lecture-room where professors and students meet? And, indeed, is not the income from any sort of revenue-producing property, when it goes to pay professors' salaries, equip laboratories, buy books, or in any way promote scientific investigation and literary production, truly and exclusively used for education? So strong

among educators is the feeling in favor of exemption, that out of some three score letters recently received by me from men prominent in this work in different parts of the country only one was opposed to it.

How are we to account for the wide difference of opinion between these men and the lawmakers?

I have attempted by conversation and correspondence to gather from business men and members of sundry legislative bodies their objections to the exemption of college property from taxation. Few of them seem to have thought out to a logical conclusion the principles on which their objections are based. Their language is often vague and indefinite, but the substance of their explanations seems to show that opposition to the measure is based on three widely prevalent objections. I shall state them for your consideration. We must reckon with them though we ourselves may not hold them.

I. Nearly all the men from whom I have heard, other than teachers, oppose the exemption of any considerable mass of property from the duty of contributing to the *material* needs of the state. A small amount of real estate or wealth in other form used for charity, religion, or education they are willing to exempt, but they manifest a prejudice common to all branches of the Anglo-Saxon race against anything partaking of the nature of tenure in mortmain, a prejudice that found expression in thirteenth-century law and may be traced in the history of English legislation to the present day. Against this prejudice it is fruitless to reason that the immaterial contributions of an educational institution to public welfare far outweigh any material aid it could give by paying taxes. In the thirteenth century such arguments did not avail with King Edward the First in behalf of the church, and today they are not of sufficient efficacy in behalf of education. Indirect benefits and immaterial contributions the average citizen hardly knows how to estimate; a contribution in money seems to him the only certain proof that a corporation is willing to discharge its duty to the state. The payment of taxes is to him the surest criterion of good citizenship. In aid of a good cause, he seems to prefer a direct appropriation, when the state can afford it, to exemption from taxation; and if the state cannot afford an appropriation, neither can it afford to refrain from collecting its dues. Temporary exemptions under certain exigencies he is willing to approve, but permanently to relieve a self-perpetuating corporation from its share of the burden of taxation is totally opposed to his notions of a wise and upright government.

If we seek the cause of this prejudice, we find it to be twofold. In the first place, the average citizen cannot disabuse his mind of the belief that the possession of wealth indicates a power to pay. He does not fully realize that the needs of an institution are apt to increase with its means, and that a university with a million a year from its endowment may be as hard pressed to meet its obligations as a small college that ekes out a meager existence on the tuition fees of its students. In the second place—and here I believe we find the fundamental explanation of the prejudice—there is an ill-defined but very real fear that an exemption from taxes might not be made good to the state by contributions

in any other form. In other words, it seems possible to many thoughtful men that the property of an educational institution might be diverted from its proper uses, and be so managed as not to benefit the public so much as to enrich its administrators, propagate religious dogmas and vicious political doctrines, or maintain at bootless tasks a set of profitless visionaries and futile dreamers. To us who are in greater degree familiar with the character of those that manage the property of our endowed institutions, such a fear seems well-nigh absurd. A diversion to unworthy purposes of the funds of Harvard, Cornell, or Stanford never enters into our calculation of possibilities. And in the case of these institutions and of many others that might be mentioned most men would agree with us that the danger is remote. But must we not on our part admit that there are so-called colleges here and there whose work we cannot approve, whose pretensions are out of all proportion to their efficiency, and whose existence is really a detriment to the cause of education? Such institutions we consider unworthy of state aid in any form. It appears therefore, that our lawmakers are right in supposing that property assigned to the cause of education may fail of its proper function; and if so, it would seem to be the part of wisdom in us to advocate, not a general exemption law, but the exemption only of institutions of unquestioned merit.

But here we encounter a difficulty. How is the legislature to ascertain the merit of an institution applying to it for exemption? And what guarantee exists that an institution now meritorious may not deteriorate; that a change of administration, an unexpected access of wealth given for specific purposes, or unforeseen reverses of fortune may not cause a radical and harmful alteration of policy? There are cases, it is true, when this difficulty may be lightly put aside. For some institutions a sufficient guarantee exists in the tradition of a long and noble past, in the binding force exercised by the opinion of a great and enlightened body of alumni, in the reputation of trustees and administrators whose character long subjected to public scrutiny gives personal security for conservatism. But for other institutions such bonds are lacking, and the legislator sees but one way to insure a proper discharge of their duties, that is: through state supervision and control. This then he would make a condition of state aid. He believes that appropriations of public money and remission of taxes should never be granted, unless the state retains the power to inspect and control the activities of the beneficiary. This leads me to the second objection that is widely urged against the exemption of educational institutions, namely:

II. State aid in any form should be accompanied by state control; but it is expedient that some institutions should be altogether free from political influence, hence it is unwise to exempt them from taxation. But why this insistence, we are inclined to ask, on state interference? Some institutions may, indeed, require supervision, but cannot a reputable college be relieved of taxation, and still be left free to direct its own actions? I have put this question to a number of men who were not engaged in teaching, and they all seem to doubt whether it would be just or practicable to exempt some colleges and to tax others. To the average legislator the word discrimination has an evil sound, and when petitions

reach him from institutions professing to be engaged in the same work, it is hard for him to see why the one should be taken and the other left. In California, for example, when Stanford some years ago was seeking to be relieved of taxation, the most frequently repeated argument that I heard against it was that the denominational colleges would be sure to claim the same relief. Yet Stanford was successful, and if the lesser colleges have advanced a claim, it has thus far not been granted. This, however, was a peculiar case, in that there lay between Stanford and all other non-state colleges a gulf so wide that it was easy for the legislature to treat them differently. Furthermore, Stanford is still young, clothed to Californians in the glamor of a new acquisition, and there still exist in the state the liveliest sentiments of gratitude to its founders and pride in its magnificent equipment for work. It is seldom, indeed, that the opportunity for just discrimination can be shown so clearly as it was in this case.

But granting that the legislature does find difficulty in making discriminations, why after all does exemption from taxation in the case of any institution render necessary a closer supervision and control of it by the state than should be exercised without exemption? Is it not the duty of the state to see that a corporation, whether exempt or not, lives up to the terms of its charter, to see that college trustees do not misapply the wealth they administer? And if the state does not control a bad corporation through its charter, does it help matters to tax it? Is there any special virtue in taxation through which it makes a bad college good? In answer it must be admitted that when possible the state should prevent abuses, and that when abuses are permitted taxation does not remedy them. These are mere truisms. On the other hand, the spirit of American institutions guarantees a wide freedom to individuals and corporations in using their own wealth, and in practice abuses must be pronounced and continuous before this freedom is curtailed. The payment of taxes does not, indeed, prevent them from neglecting opportunities and wasting their resources, but it puts them at scot and lot with other citizens, and entitles them to manage their own affairs even to their own detriment. Obviously, however, the case is altered when a portion of the wealth they use is furnished with a view to special ends by the state, whether it be in the form of appropriation or of remission of taxes. It then becomes the duty of the government to determine how this wealth shall be used and to require a strict accounting from those that have it in charge.

Now, I much doubt whether either of the objections I have mentioned has been sufficient to cause active opposition to the proposed form of aid to education; but that they have been very often strong enough to determine votes against specific measures before state legislatures I may confidently assert, on the authority of the men that cast the votes. Where, however, active opposition has appeared, it has usually been due to a third objection, namely:

III. The exemption of revenue-producing property, particularly in the form of real estate, belonging to any institution works a hardship on the community where the property lies. This hardship is twofold. In the first place, it increases the burden of necessary

taxation on the rest of the community by just the amount that is remitted to the institution. And, in the second place, when the property is used to conduct what the Tennessee law calls a "secular" business, it puts at a disadvantage those engaged in the same business on property that is taxed.

In many instances it is easy enough to show that this hardship is made good to the community a thousandfold—in material as well as immaterial ways—by the existence within its borders of the institution that holds the property. What would Cambridge be without Harvard, Ithaca without Cornell, or Charlottesville without the University of Virginia? Even large cities, though their business and daily life are not dependent on a single institution, do undoubtedly derive great and tangible benefits from the presence of a well-equipped college, and the residents of these cities know it. Thus the action of Baltimore citizens was not wholly altruistic some years ago when they made subscriptions for the relief of Johns Hopkins. In New York, Columbia is rightly regarded as a noble element of the public wealth. And who can forget the appreciative remark attributed to a Chicago citizen, when a great university was founded there, that "we shall now make culture hum in Chicago"?

But in time the benefits, both material and immaterial, that a community derives from such an institution are capitalized, and the amount appears in the enhanced price of real estate and higher valuations of business and social opportunities. For newcomers the value of these benefits is included in the price of what they purchase as truly as is that of salubrity of climate or beauty of location; while old residents learn to adapt their domestic budgets and business investments to the altered scale of valuations. In other words, society accommodates itself to the conditions brought about by the presence of the institution. After this accommodation has been made, the exemption of the institution from an accustomed tax inflicts an uncompensated loss upon the rest of the community, and can be sought, not as a right, but only as a boon from the inhabitants, a boon to be considered by them in a spirit of generosity tempered with discretion. On the other hand, efforts to impose on such an institution a new and unusual tax as was done some years ago, I believe, at Harvard, can be interpreted only as the result of a narrow-minded and selfish desire of the inhabitants to wring additional and unjust contributions from what is already the source of innumerable special benefits to them.

These conclusions are based on the supposition that the property under consideration lies in the same community as the institution that owns it. When such is not the case, the arguments against exemption from local taxes are materially stronger. It not infrequently happens that through bequest or otherwise a college becomes possessed of real estate in some distant town. In that event it is difficult to show that the remission of taxes on the property is made good to the community by any sort of contribution from the college to its welfare. To illustrate: a year ago the University of California acquired under the will of a public-spirited citizen an estate in the city of Fresno said to be worth a million dollars. I do not know at all what disposition has been or will be made of this estate;

but on the hypothesis that it will be free from taxation, as is other property of the state university, and that it will be managed exclusively for the benefit of that institution, it is evident that the inhabitants of Fresno must henceforth bear a heavier burden to maintain their police system, their public schools, and sundry municipal utilities. To relieve the hardship arising in such a case the so-called "Maine system" has been advocated. Under this system educational institutions would pay all local taxes in the communities where they have property, and afterward the amount so paid would be refunded to them from the state treasury. Such a plan seems to involve no more serious difficulty than that of a careful system of accounting and auditing. But if it be adopted, the nature of tax exemption is no longer veiled. To the densest mind it then appears as neither more nor less than a money contribution from the state to the institutions.

The causes I have enumerated appear to be those on which is based all persistent and intelligent opposition to the exemption of educational institutions from taxation. In the course of my inquiries, however, I have found that men have sometimes voted under the influence of a miscellaneous group of motives that are for the most part local and temporary. Occasionally the exigencies of the state budget appear to preclude any extension of exemptions. Again, sectarian jealousies have not infrequently led men to vote against a measure that would benefit some denominational college. And especially in the South there are still many people who believe that while the state should furnish opportunity for primary education, those that seek a higher education should be made to pay the cost of it. Such motives, however, and others that might be mentioned hardly require comment in this place.

In the end my inquiries lead me to conclude that to advocate a general exemption law in this country would be unwise; but that each institution seeking relief should be considered on its merits; and that the relief granted should be determined, not so much by the amount and the immediate use, as by the nature and the location of the property the institution holds.

DISCUSSION OF THE EXEMPTION OF EDUCATIONAL INSTITUTIONS FROM TAXATION

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. THOMPSON: If we take our state constitutions throughout this country I presume in almost every case there is a phrase which says that all property shall be "assessed for taxes under general laws, and by uniform rules, according to its true value," and no legislator has any right to make any exemptions unless he can think that he is really taxing the whole state in some way or else is voting a certain exemption which is an exemption throughout the state. The argument that the property in a certain municipality increases so much the value of the property surrounding it that the rate is not necessarily increased, but is even diminished, is a very unwise one to carry too far. The railroads use that argument exactly, and have proved absolutely in one state that in a community where a railroad was, if they acquired more land the property

round them was so increased in value that the tax rate was often diminished; but nevertheless the citizens and legislators did not think that the railroads should be exempted on that account—the point at issue was changing the rate at which the railroads were taxed. Now if the increase in value of the neighboring property be the only point considered the time may come when legislators will feel that they cannot exempt college property on that basis. On the contrary, legislators *can* feel that they can consider the matter in a broader way: that it is necessary that there shall be a higher educational institution; that in most states all who are interested in legislation realize that a private institution already organized for doing it can carry on that work of education and thus relieve the state to that extent. It is on that basis, that some exemption has been made in the case of educational institutions; the states feel that if they did tax these educational institutions they might thus lower their efficiency, and they might then have to tax the whole community for educational matters.

MR. ELIOT: The reason for the exemption of colleges, as contrasted with railroads or factories, is that all the proceeds of that exempted property are devoted to an indispensable public use, to the highest public use. That is the fundamental distinction between beneficial properties which are taxed and beneficial properties which are not taxed, a distinction which it is somewhat difficult to get into the heads of legislators. When we get clearly in view the object of the exemption, we shall never be tripped by the argument that a railroad is a beneficial institution, or a cotton mill, or a printing establishment. The whole question is the distinction between the public and private use.

The exemption in Massachusetts applies to all real property of churches, colleges, hospitals, etc., institutions of religion, education, and charity, which is used for the objects of those institutions. The statute also exempts all the personal property of such institutions—stocks, mortgages, etc. The one thing which is not exempted in Massachusetts is real estate which is not used directly for the purposes of the institution, but as an investment. Now the object of that exception to the exemption was correctly stated by Professor Page. That is a survival of the objection to mortmain. It was held very early in Massachusetts that it was not expedient that an undying corporation should hold real estate for investment. Our charter here in Harvard University also prevents us from holding real estate in any state of the Union except Massachusetts. That objection to a corporation, an undying corporation exercising a public function, holding real estate as an investment is, I suppose, on the whole a sound one. The old objection to the monasteries holding great bodies of land would apply to colleges holding great bodies of land in this country. Many gifts of lands having been made to Harvard in the eighteenth century and in the early years of the nineteenth century, the corporation in that day very wisely sold all those bodies of land, because they did not wish to encounter this objection. That question is completely severable from the rest of the discussion, and I have never found any difficulty in making legislators and committees see that that exception to the exemption in Massachusetts has an historical foundation.

[*In reply to a question*]: We do not hold mortgages as a rule. We find it more profitable to hold other forms of security.

MR. JORDAN: When Stanford University was founded we discovered that there was no exemption in California at all. It was the theory that all property should pay its share of the taxes. We began a campaign on the ground of public utility. We tried to carry with us the Academy of Sciences and certain similar organizations that were distinctly of public utility and were not money-making in any sense. We found it necessary, however, to stand alone at first. That is, to ask for an amend-

ment that would permit Stanford University to be regarded as a quasi-state institution, on the ground that the action of the Board of Trustees was in certain circumstances subject to review by the Supreme Court and its members subject to removal by the state if the money was misappropriated. We found three forms of opposition. One was it would open the door to the Catholic and the other denominational schools. The next was that it would not open the door, that if the largest private institution got in first they would hold the door tighter. And the third one was that Stanford University owned something like 100,000 acres of land about the state and 60,000 acres in the heart of one county and which was not used for educational purposes. A constitutional amendment was passed covering releases from state taxes but subjecting the university to local taxes in all these counties except upon the university itself and the ground on which it stands. We have, however, never yet asked the state for land exemption. Following this there has come also the amendment to the state constitution exempting the Academy of Sciences, the Lick Polytechnic School, and church buildings. Thus far the other colleges have not succeeded in getting exemption, but they are trying for it, and on the whole they regard the door as being rather opened than closed by the concession of Stanford.

MR. ELIOT [*in reply to a question*]: Dormitories are included in the present attack on the exemption, the argument being that dormitories owned by colleges in a college town compete with a legitimate business to be conducted by the residents of that town, namely, in letting lodgings to students. That is, the college was carrying on a business which competed with a business of private citizens and therefore should not be allowed. During the progress of the debate, the dining-halls were dropped by the advocates of the bill. They found that our dining-halls were conducted in such a manner that no profit was derived for the college or anybody connected therewith. It is a clear case of an advantage which the college was procuring for all its students. They therefore dropped dining-halls and retained dormitories and professors' houses. The opposing argument was that dormitories and professors' houses are, in the main, at epochs, essential to the creation and maintenance of institutions of learning. We had an instance in Tufts College which was built upon a bare hill. There it would have been impossible to establish a college without building professors' houses and dormitories and dining-halls. That is true also of the women's colleges. You cannot carry on a women's college in Massachusetts without providing carefully for the lodging of the students and for their feeding. It has been a very great drawback, for instance, to Radcliffe College that it has had insufficient foundations of that kind for its students. Then there was the support for the exemption coming from the Catholic church. It is extremely difficult to see how a seminary for priests can be conducted if dormitories are to be taxed. A variety of institutional forces was brought to bear, therefore, against this attack on the exemption in Massachusetts, and the resistance was successful. But the attack is recurrent, and it is of the utmost consequence that the principles on which the exemption is based should be firmly apprehended by the educated public.

MR. WEST: So far as I know, no real or personal property belonging to Princeton University or any other college in New Jersey has ever been taxed, if used for academic purposes. What would happen in the event of a professor's house or a real estate investment if they were not an integral part of the campus I do not know. We have no such instance. We do hold some property in other states, and I am sure it is all taxed. I believe we do pay as a voluntary contribution,

perhaps from motives of prudence, one-tenth, if I remember the amount, of all the local taxes of the borough of Princeton for police, light, etc., but this is not a matter of legal exaction.

MR. VAN HISE [*in reply to a question*]: I do not know of any serious attempt on the part of the Middle-West state legislatures to tax any of the property of any educational institution whether devoted directly to educational purposes or income-producing.

MR. WHEELER: The Kearney estate which Professor Page referred to, includes 5,500 acres of rich land, and excellent equipment. The practical difficulty arises from the fact that withdrawing it from taxation means the destroying of nearly the entire income of one school district, and a considerable portion of the income of another. Now the net income of that property will be used for public purposes, and yet practically a difficulty is involved other than that which has caused Massachusetts to avoid exemption from taxation on income-producing real estate. It has been suggested as a solution that we should ourselves support the school there. Mortgages happen to be the best form of investment for us at the present time, and we hold also a good deal of exempted real estate; hence it has seemed to our regents worth while that it should not be massed too much in one place.

MR. ELIOT: It was in order to bring out such different conditions that this subject was brought before the Association. In the older states this whole question of the support of the institutions of higher education is likely to be discussed from time to time. Our population here is undergoing such tremendous changes that the force of tradition coming down from a population of an entirely different character is likely to be impaired. And we may be thrown back at any time upon a discussion of the fundamental bases of society in this respect. Now in sympathy with the institutions of the older states, is it not to be hoped that a vigilant eye will be kept by the newer institutions of the West on their own doings with reference to their bearing on existing laws which support the institutions of education, charity, or religion in the older states? The case just referred to, for instance, looks to me extremely dangerous in regard to the maintenance of exemption in general and it is now almost one hundred years since the president and fellows of Harvard College, seeing the danger, got rid of all such investments. Gifts of land were then a favorite form of benefactions but our corporation nearly one hundred years ago distinctly got rid of all that kind of property. Now if we examine the only two ways there are of supporting institutions of higher education, we shall see, I think, that in most cases the actual support is practically mixed. For instance, the University of California is a state-supported institution direct, but it is also an endowed institution. Just so, here in Massachusetts. The contribution of the earlier settlers, so to speak, to the support of such institutions was to be by exemption, and they had the patience to wait for fruit, and the fruit was very good, but then all along from 1636 down to 1810 the state repeatedly made grants to Harvard College. In the early times they were very small grants, to be sure, but still they recognized the principle of direct support also. And so it will be all over our country, that the two methods of supporting institutions of higher education will both be used in all our states. We are all going to have a common object therefore in the support of exemption, and as the country fills up, and as population becomes more and more urban, it is going to be easier to demonstrate the proposition that the things exempted are no burden, but on the contrary a benefit. We have learned a great lesson in Massachusetts on that subject from the recent movement with regard to parks, gardens, and other public reservations of land. The more such exempted areas we have

the better, not only for the health and happiness of the community, but for its commercial prosperity.

Here in Cambridge during this last attack on the exemption, the city took no part in the opposition.

This question has for Massachusetts institutions a deep significance. Harvard University simply could not bear the reduction of its income for education which would result from a taxation of its resources. If the personal property were not exempted, taxation would take at once a full one-third of the entire income because none of the personal property is hidden. Of course the real estate is always visible, and the valuation of it steadily rises.

Mr. PAGE: What is the proper way for us to meet the argument that I have encountered with so many men in our state legislatures that exemption from taxation ought to be accompanied by some sort of state supervision? In the case of a great institution like Harvard, with accounts that are published and an administration that every one has confidence in, I should think that would be a simple matter; but in other states, where there are a number of colleges, shading off one into the other, some good and some bad, and with no very definite line between them, many of the members of the legislature naturally think if they exempt them from taxation, they ought to be inspected by the state. It would seem absurd for the state to inspect an institution like Harvard or Stanford, but some of these lesser institutions must be inspected, and where can you draw the line?

Mr. ELIOT: The mode in which we attempted here to meet it, and I think it has proved pretty satisfactory, is by making the most complete statement of our business every year that we know how to make. We make a Treasurer's statement which occupies more than one hundred octavo pages every year, and we rely on that publicity to meet the very difficulty which has just been suggested. I wrote the Commission in 1873 that no institution of any sort, church, college, or hospital, should be exempted at all unless it made a complete statement of all its expenditures and receipts every year. It has been a very great evil in our country that so many of the institutions of education and charity and religion have been slackly conducted. There are institutions represented now in this room, which have been long in existence, that never published any intelligible treasurer's statements at all, until very recently. That is a dangerous policy. Secrecy of untaxed institutions is much to be regretted. One of the miners' unions a few months ago had a fund of \$1,200,000, which was held in the state of Indiana, and the suggestion was made that that was a taxable fund, that it was held for no public use but for a private one. I asked Mr. Mitchell, and he said no, that was not taxable at all; that the union is a benevolent institution, a public charity. That is true in some sense, but it is always dangerous to the exemption that an exempted institution should keep its affairs secret. That was one of the grounds of the attack made on the churches in 1873. How many hundreds of millions has the Catholic church now got in Massachusetts exempted? Nobody knows. The real difficulty is in the secrecy, not in the exemption. I still believe in the doctrine that no institution should be exempted, I don't care what its object, unless it every year makes public report to some public authority of all its doings and all its accounts.

Mr. JORDAN: I most fully agree. Our charter requires that a report should be made to the government each year and, in case any part of the money is diverted for sectarian or political purposes, the trustees may be removed by the supreme court of the state.

Mr. HALL: I have heard the expression that taxation had to come anyway, sooner or later,

and that we must make up our minds for it. I had almost come to accept this until I heard the admirable address of President Eliot before the Committee. Two heads of institutions in New England, outside of Massachusetts, where this subject was brought up expressed that same idea, and I know that in one of them there was one of these compromises years ago. That was done with the view that compromise did not make so much difference, because eventually taxation would have to come.

MR. ELIOT: I am very much encouraged by the present outlook. This is the fourth attack that I have had to do with since I have been president of Harvard, and two things are noticeable about it. In the first place it is an attack on the least area of the exemption that has ever been made in Massachusetts. It really would have little significance for Harvard if it were confined to the things mentioned in the bill. We care nothing, for instance, about professors' houses, having passed the stage when they are necessary. Secondly, its advocates represented nothing of weight in any of the communities for which they appeared. There were three of them—one from Northampton, one from Amherst, and one from Williamstown. A single witness came in of his own accord, the mayor of Medford, and disposed in ten minutes of all the effects these three men had produced on the Committee. He testified there was not a person in the city of Medford who would have Tufts College taxed on any of its property, although more than half its real estate was in that city. That bare hill was perfectly worthless until Tufts went there, and the presence of Tufts College has been a great gain to the city of Medford. His voluntary appearance was encouraging and effective.

The common opinion that taxation has got to come is one of the worst examples of a state of mind of most abject feebleness. We hear that said every day. It has got to come for it is destiny, or something to that effect—even by free Americans born and bred, who ought to know that it is we that make destiny and not destiny that makes us.

MR. WOODWARD: Although our Institution has not yet found its proper place, all these questions are already concerning us and they are giving me a great deal of anxiety. We are amassing considerable property in various parts of the United States—an observatory in southern California and a laboratory in Arizona. In the city of Washington we have already acquired considerable real estate, and propose to erect a few expensive buildings. If our property is to be seriously taxed, we shall have to make haste to plan to provide therefor.

On the other hand, it seems to me that a new institution like the Carnegie Institution of Washington may fitly very carefully consider the customs which have come down to us from antiquity. In the case of the closely allied question of the distribution of publications I am disposed to take a directly opposite view to that which has come down to us from antiquity. My impression is that our Institution has made a grave blunder in giving away any of its publications. I think from the sociological point of view that it would be a good deal better, not simply for our Institution but for other institutions, if we were not to give away any of our property.

MR. ELIOT: The practice of English parliamentary bodies is suggestive. They give away nothing and they charge for everything—at low prices, to be sure.

I am glad that the attention of the trustees of the Carnegie Institution is directed to this general question. Their position will be a national one. Of course they will be holding property in many states, and their example and the doctrine they preach will be of very great value to all of us.

[*In reply to a question*]: I think there is nothing in the constitution of Massachusetts to prevent a progressive income tax, although it is not generally thought to be equal taxation. This

whole question and many others of more importance are seriously involved in our method of taxation. It would clarify the subject now before us immensely if we had the system of taxing income and not principal. The method of taxing forest lands, for instance, is simply destroying the forests by making it impossible to hold them, whereas a rightful method of taxation by annual value would enable the owners to keep them. Of course that is an immense subject which our legislative bodies have thus far found it impossible to deal with.

MR. REMSEN: We have no dormitories, no dining-halls, no professors' houses, so that anything I may say has no direct bearing on the subject presented in the first paper. The state exempts the property of all educational institutions, in so far as this property is used directly for educational purposes. Investments are not exempted. That is all very simple. But we have a site for a future home and we have not yet come to terms with the authorities as to what should be done in the matter of taxation with reference to that site. Apparently we shall have to pay taxes until it is occupied for educational purposes. The law exempts only forty acres outside the limits of the city of Baltimore for educational purposes, so that when we occupy that land, all above forty acres of it will perhaps be taxed. The site is within the city limits, and the law is not specific in regard to land so situated.

MR. HASKINS: Is it not necessary to have constant discussion of the duty of the state toward education if exemption, which is a public grant, is to be maintained? In the West and South, the maintenance of the state universities has afforded at every session of the legislature a considerable opportunity for educating public sentiment on this point; but the fact that education in the eastern states has been so largely in the hands of private institutions has, on the whole, led both those institutions and the people to forget the duty of the state in this direction. And is not discussion of that fundamental principle likely to increase in the more settled portions of the country, with the increased difficulty of living, and possibly to spread in the West? It is a question which is likely to arise in the whole country, as the need of taxing property in cities becomes greater and property round about is seen to be exempted from taxation.

MR. VAN HISE: It seems to me that the question could hardly seriously arise among the states which contribute heavily toward higher education, for the reason that the legislatures and the people and the members of the state universities recognize that the private institutions are doing exactly the same class of work with exactly the same ideas and with exactly the same public benefits that accrue from the state universities, and if the people contribute largely to the support of the state universities, why then should the question arise as to the taxation of an institution like Northwestern or Chicago? The very fact of a large contribution by the state to her education, is a safeguard to private institutions through all the Middle West.

MR. ELIOT: It was for that reason that Appendix Table I (see page 107) was made up. In our Massachusetts discussion there has been a class of persons who hoped that if the exemption could be done away with, their own taxes would be lower. But when they were shown what the western and Pacific states appropriated for educational purposes, it suggested to them that on the whole the exemption method had some advantage over the direct appropriation method. This method has brought a great deal of property into Massachusetts from outside; for instance, we have raised nearly four millions of dollars within the last five years for the Medical School, and certainly three-fifths of the money came from outside of the state.

MR. ABBOTT: Some years ago I had occasion at Stanford to investigate the subject of tax

exemption. It was during the period when the university was undertaking to obtain exemption from taxation for a considerable portion of its property. I examined all the statutes of the several states and probably all the decisions of the various state courts dealing with tax exemption. My study of the statutes and decisions gave me some impressions that may not be without service. In the first place, it was clear that there is a general willingness throughout the states to exempt the property of religious, charitable, and educational institutions. Again, there is a considerable uniformity among the states as a whole as to the kind of property exempted and the amount of exemption. But I think that after looking over the statutes covering a considerable period of time one must feel that there are influences that vary and sometimes entirely do away with tax exemption.

The state of California affords a striking instance. In the beginning, for example, the wagons of emigrants were exempt, the flumes of the miners also, and later, fruit trees, but in 1870, under the influence of the Kearney movement, tax exemptions practically were swept from the statute books and every institution—religious, educational, charitable, public or private—was subject to taxation. I imagine that if the people who framed the constitution under the influence of the Kearney movement had had their attention called to the wisdom of exempting charitable, educational, and religious institutions, no doubt a provision would have been made to that end, but there was none. And the fact remained that for years in California such institutions have been seriously burdened. This state of affairs was due to the general political upheaval of 1870, and I doubt if it were due to a conscious movement on the part of the public in general.

In the case of the decisions of the courts, however, we find a conscious purpose on the part of some zealous tax collector to enhance the public revenues. The decisions as a whole make it clear that all property ought to be subject to taxation and that the burden of proving a right to exemption rests upon the institution claiming it. Again, where an educational institution is doing honest work and merits exemption it usually will be left undisturbed. But if occasion is given for a tax collector to invoke the aid of courts or to oblige an institution to ask for relief from taxation, it is likely to be because it has failed in its duties or possesses property that really ought to be taxed.

Perhaps I may state my point in another way. As regards legislation, under temporary excitement it is possible for a state to sweep tax exemption from the statutes, but as a rule it is safe to trust the good sense of the people of any of the states of the Union. But with regard to the action of tax collectors and with regard to the action of the residents of any community in which an educational institution is located, it is not so easy to speak with confidence. If the tax collector or if the public feel that an institution is being administered in secret, or that it is enjoying the income of property that ought to be taxed, it is safe to say that efforts will be made to tax it and that the more such matters are agitated the heavier will be the burden on the institution seeking to secure exemption.

My own impression is that an absolute openness of accounts is essential and, second, that an institution should not invest in property that invites criticism on this point, nor should it retain property given to it, if it be of this nature, longer than is necessary. It is easier to keep out of court than it is to get satisfaction after one gets into court, and this principle is a wise one with regard to administering university property.

THIRD SESSION

THE BEST MEANS OF INTRODUCING THE PENSION SYSTEM INTO
AMERICAN UNIVERSITIES

DISCUSSION

MR. ELIOT: At the recent meeting of the Carnegie Foundation trustees the discussion was opened by the hearing of a committee of gentlemen appointed by the Association of State Universities. The general plea was that the Carnegie Foundation pensions should go as well to state universities as to endowed institutions; that the state universities were of course wholly undenominational; that they represented now about half of what may be called the university effort of the whole country, and that in a short time they would represent much more than half; that the professors in the state institutions were the same sort of men as the professors in the endowed institutions doing the same sort of work; that there was no reason which should bar them from participation in the benefits of the Carnegie Foundation. President Pritchett in reply stated the arguments against giving Carnegie pensions to officers of state universities, and showed the special difficulties under which the Foundation would labor if that should be done. The board left the subject for future determination and to get a good deal of further information upon the subject. President Pritchett has in preparation a careful treatise on the professorial conditions all over the country, salary, work, amount of work, possibility of outside earnings, household expenses, and general living expenses.

In the course of this discussion several things came out. For instance, it appeared quite distinctly that some professors in state universities rather dreaded the institution of a pension system which was wholly within the control of the university authorities themselves. The reason for this seemed to be that a pension system would provide in the university an extremely easy and at the same time respectable mode of creating vacancies, and political managers desire nothing more than vacancies. The Carnegie Foundation pensions on the other hand would not be accessible for the purpose of creating vacancies, but would be administered under rules laid down by the Carnegie Foundation. The question arose also as to the quickest way to cause a pension system to be established at the state universities. It was, it was said, out of the question to obtain direct specific appropriations for the establishment of a pension system in state universities. Of course there are various modes in which different states convey money to their universities. In some every bit of money conveyed to the uses of the university must be specifically appropriated with mention of its precise object. In others where so many mills on every dollar of valuation are given, a specific appropriation is not absolutely required. This gives much greater freedom to the trustees. There are also universities enjoying the mill law where provision is made that the total sums which the university receives shall be spent in certain specific ways. There are at least three processes, therefore, recognizable among the different states.

Several members of the board however seemed to believe that in some of the states it would be possible to obtain definite appropriations for pension purposes. The example of the University of California was cited where the pension system has been created without specific appropriation of

money for the purpose by the state legislature. It seemed to be agreed on all hands that it was highly desirable in the interest of American education that a pension system in all the American universities and colleges should be established and put in force. That seemed to be taken for granted. As to how most effectually to promote the coming of that improvement opinions differed, and differed quite decidedly and strongly. It was this difference which induced me to propose that this Association should consider the subject briefly tonight.

MR. VAN HISE: In the discussion which took place before the Carnegie Foundation I urged that it was the state university point of view that that connection should not bar them, not that the Carnegie Foundation should invite all the state universities to participate in its benefits, but merely that because an institution had a state affiliation that seemed to me to be no reason why the Foundation should bar it. It seems to me that the ideas and the aims and the purposes and the services of the state universities are the same as those of private institutions and that the members of the instructional force are as fairly worthy of consideration as the professors in private institutions.

The only reasons which have come to my knowledge for making an exception are that if the state institutions are excluded from this fund, the states will provide funds, and that the granting of pensions by the Carnegie Foundation would weaken state support. Now upon this first point I am not aware that there is any difference of opinion among the presidents of the state universities. So far as I know, the only institution which has attempted anything of the sort in a systematic way is the University of California. In the most favorable states I think the state university president would hesitate to take the matter up with the legislature. The effort and time to be expended on a campaign of education before the state legislatures with reference to pensions would be at such a cost with reference to other matters of the university, that from the point of expediency it is wholly impracticable. We may suppose that in the state of Wisconsin it would be possible to get say \$10,000 a year as a result of a long campaign for pensions, but I feel sure if that were done it would be at a loss of \$50,000 or \$100,000 a year somewhere else. So I adhere firmly to my conviction that if the Carnegie Foundation does not provide for the state universities in this pension system, most of them will find it practicable to take up the matter themselves, and obtain the pensions from their legislatures.

As to the point that the gift of this money would weaken state support, every private gift that has been given to the state institutions has strengthened them just as much as they strengthen a private institution, and every increase of strength makes it easier to gain state support, because it is easier to show that an institution is doing an increasing service to the state, and therefore to make a stronger claim for further state support. It is easier in the University of Wisconsin now to get \$100,000 than it was ten years ago to get \$10,000, simply because a record of the service of the university can be pointed out.

As these institutions in the Middle West become older and the alumni become more numerous and wealthy, undoubtedly the amount of money they will get from private sources will increase. So far, however, this has not been an important factor with the single notable exception of California, where gifts form an important part of the resources of that institution. The trustees of the Carnegie Foundation have already recognized at least four institutions that have received public support, the Massachusetts Institute of Technology, the University of Pennsylvania, the University of Vermont, and Cornell University, so that the difference is only a difference in degree. These stand

among the institutions where private beneficence is the controlling factor, and where public support is the minor factor. The state universities of the West stand among those where public support is the major factor and private support is the minor factor, but the aims, the purposes, the ideals, the method of work, the service performed, are identical. In the private institutions of the East, the resources are greater than at any state institution. Their funds are larger in amount, but their resources are not commensurate with their opportunities, and thus this Carnegie gift has been of great assistance to them. In the universities of the West, the resources, although large, are as far below their opportunities as are those of these eastern institutions, and therefore there is the same reason for granting Carnegie aid to each. Failure upon the part of the Carnegie Foundation to recognize the needs of the state institutions will be a threefold handicap on them, one which I believe the trustees will not wish to undertake to impose unless it be a necessity. In the first place, if I am correct in the belief of the impracticability of obtaining appropriations for this purpose, the state universities will be at a disadvantage in securing professors. For instance, if we ask for a man to come to a state university who is in the East the only way in which we can induce him to come, other things being equal, is to give increased compensation which will enable him to buy an annuity. In the second place, we are unable to retire the men who should be retired, and thus are unable to keep up the strength and vigor of our force. Thirdly, there is less inducement for men to go into the profession of teaching in the West than in the East, and we will find it more difficult to lead our able young men into it. And thus we have a threefold handicap. I am not saying that there will not be some among the state universities who will, in case the Carnegie Foundation fails to include them, meet the emergency by taking funds from private existing resources, but I do believe that the great majority of state universities are not now in a position to do this thing for themselves, and will not be for many years, and that those that should be encouraged the most to do their great work, are the ones that will be the most severely circumscribed. Therefore, I shall very greatly regret for the cause of education in the West and especially in the South if, in addition to the enormous difficulties which the institutions in their earlier development must meet in building themselves up and making themselves first-class institutions, they should have this additional handicap imposed upon them. I believe that if the purposes of Mr. Carnegie are carried out there is no direction in which the funds can be more wisely expended than among the state universities. I do not say that their claims are superior to the claims of private institutions, I simply hold that they are on a par, that there is no just ground for discrimination between them.

MR. ELIOT [*in reply to a question*]: Dr. Pritchett's paper is quite sure to be published and will be sent, I have no doubt, freely throughout all the institutions interested in the discussion. There are already in print several papers in the interest of the state universities, and therefore both sides of this question are pretty sure to be brought before the public in print. So far as I have heard the discussion, there seems to be but one opinion as to the expediency of instituting pension systems in all of our colleges and universities, but I have heard it suggested that the quickest way of getting these pensions established is to bring into sharp contrast and competition the conditions of life of professors in those institutions which have a pension system, and in those institutions which have none. For instance, if it will turn out as a result of experience that a young man invited to a state institution, and also to an endowed institution at the same time prefers the endowed institution because it has a pension system, or because the Carnegie pensions are there accessible, it will tend strongly to induce state universities and all universities which have no pension system to create

them; and not many cases of that sort (and they have begun already) need arise to bring to pass the establishment of pension systems in state universities, because that is an argument which it is easy to bring home to a state legislature. It touches the pride of the people in their state universities. Now that seems to me to promise a pretty prompt solution of the difficulty of the state institutions, and I should not be at all sure that this was not the very quickest mode we could get. That competition for services is a very urgent thing in our country, and it is fortunately a thing which people quickly understand. When, in 1880, our present pension system was adopted in theory, there was serious doubt in our governing boards as to its real efficiency and desirability, but I never hear a word of that sort now-a-days. So it will prove, I think, in the governing boards of all our institutions as soon as attention is drawn to its efficiency through the competition for professors. It is in such ways that the pension systems in our transportation and other commercial companies have been brought about, through the effort to secure highly desirable service. Wealthy people of the states which support state universities take the same view, and their legislatures will take the same view. Of course, our problem is simply how to secure for education the greatest possible resources from all sources, from state treasuries and from endowments. We want to get all the money possible for education by pulling all the strings of purses, public and private.

MR. SMALL: At Chicago we are just now trying to persuade ourselves that the quickest way to establish the pension system is to be excluded from the benefits of the Carnegie Foundation. We are 95 per cent. freer from denominational control in fact than some of the institutions included in the benefits of that Foundation, but in law we are in the tabooed class. Now while we are eating our sour grapes we are saying to ourselves that it is very much more desirable that institutions shall have a system in which the pension shall be a part of the contract than that the pension shall come as the award of a charitable foundation. I wish President Eliot would tell us to what extent the superiority of the pension system as administered by Harvard University itself has been felt to be an advantage in Harvard's experience.

MR. ELIOT: From the point of view of the University the Carnegie Foundation simply relieves the treasury of Harvard from paying pensions which the Harvard treasury would otherwise pay. The rights of the professors here are not at all affected by the existence of the Carnegie pensions. A Harvard professor going out of office is entitled to a larger pension than the Carnegie Foundation gives. The difference is made up by Harvard University, and the only advantage which Harvard University has thus far derived from the Carnegie Foundation, except this purely pecuniary one, is that the Carnegie trustees by special vote awarded a pension to the widow of one Harvard professor, the Harvard system having no provision for widows. The view of the Carnegie Foundation as a charity, so to speak, does not seem to me at all a proper one, because from the point of view of the Carnegie trustees, as also from the point of view of the Harvard corporation, the pension is a thing earned. In the case of a pension voted to a widow, it is voted on the ground that her husband earned it. The Carnegie Foundation deals only with and through the institutions on the list of accepted institutions. Although a pension given to a professor not in the service of an accepted institution is an act toward a person, in general the Carnegie Foundation deals exclusively with institutions. I hardly think we need apprehend that the Carnegie Foundation allowances will come to be looked upon as charities.

MR. JORDAN: It seems to me that the state institutions are put to a disadvantage in com-

parison with the denominational institutions. It apparently was Mr. Carnegie's desire that the latter should standardize themselves by cutting loose from the nominal denominational control. The state university cannot cut loose from state control. If the professors in an endowed institution find the pension a part of their earnings, similar pensions have been earned by the professors in the state institutions. It seems to me that it might have been in some respects more just if the Carnegie Foundation had been given to the state institutions only. Then the others could all standardize themselves by giving themselves to the state. Only one argument against the inclusion of the state universities in the Carnegie Foundation appeals to me as having any cogency at all, and that is the argument that there is not money enough to go around. Apparently the fund now is something more than twice as much as is at present required, but these institutions will grow very rapidly in the next twenty years, and if the Carnegie Foundation is to accomplish anything at all it must be large enough for an indefinite period of time. I have not been able to see how any considerable number of the state institutions could be taken in on the present fund. That, in my judgment, is the only argument that separates the state universities from the others.

MR. VAN HISE: It does not at all follow that all the state universities will make application for Carnegie funds. I know that among the trustees of some state universities there is a feeling that those universities should not apply. But, if, however, there are certain institutions which cannot themselves provide the funds for pensioning purposes, and they are willing to apply, I can see no good ground for excluding such state institutions. I do not know the finances of the Carnegie Foundation, and I do not know how many of the state institutions would apply, but if the principle were adopted, accompanied by whatever regulations seem necessary so far as non-eligibility is concerned, I imagine that the demands which would be made upon the Carnegie Foundation would not be so heavy as has been thought.

MR. JORDAN: The fund would be large enough now, but a hundred years from now it would not, if the rate of growth of state universities goes on as it has been going.

MR. WHEELER: It seems to me that the line drawn between the state universities and the endowed universities of public character by the action contemplated would be false to the essential facts of present American society. The characteristic institutions in New England: Brown, Harvard, Yale, Bowdoin, and Dartmouth, are state institutions. Brown was created as a state university, and its charter distributed the trustees between the denominations of the state essentially in the proportion in which the religious population of the time was made up, but Brown is left stranded as a denominational college, though it was not intended so in its foundation. Harvard and Dartmouth and Yale had their dislike and fear of legislative review and interference, and very quickly drew back from their position as state universities of that kind. They are today what we should call public institutions but not sectarian institutions. There is a body of colleges now in the country which are fairly called sectarian; they ought not to be afraid of the name and ought to be frank in the acceptance of the fact that they exist for the purpose of providing material for the better working and the fuller glory of certain religious institutions known as denominations. The net income of such institutions is not applied to public purposes, pure and simple, perhaps it may be said that ultimately private aims are involved. We have another class of institutions in the country which are ready to accept money from states. Cornell does, Pennsylvania does. Johns Hopkins has shown itself ready to accept what the legislature of Maryland would give. Cornell certainly is very close to being a state university. It now, I believe, defines its position as a state university so

far as certain departments are concerned. I mention these as illustrations of the fact that in actual existence the line is not really there. I should have to be pretty discriminating in order to determine in what sense my own is a state university in which Cornell is not. The money that is to be expended immediately for education, at Berkeley is derived from the state scarcely to one-half of its extent. We go before the legislature for money, but the legislature has no right of inspection under our charter. The board of regents constitutes a private trust for a public purpose. Whatever funds come into the control of those trustees they dispose of according to their judgment. There is no way in which the legislature can reach them except by withholding funds, or in the case of free grants, rescinding action. We face the question as to what constitutes the University of California a state university as distinguished from Harvard as the university of Massachusetts, or Cornell as the university of New York, or Johns Hopkins as the university of Maryland; in order really to discriminate at all you are limited to the fact that the regents, sixteen out of twenty-three, are appointed by the governor. If any of our eastern endowed institutions should elect to their boards of control men who did not in the long run command public confidence, they would be rebuked in one way or another. Our governors find themselves held to a very strict account before the public for appointing men who are not of standing and character in the community. This means only two different ways of creating a public and a publicly responsible board of control, and the difference is in form and not in spirit. My objection to the proposed action is that it will be a distinct injury to the publicly endowed institutions of the country to make that false discrimination. It will react, it seems to me, very much against the attitude of these institutions of which President Eliot spoke in his discussion of taxation. After all they are public, and not private and sectarian, they are guaranteed before the public by their responsibility to the common public sentiment in regard to their control, and the inconsiderable factor that in the case of the state universities they are sometimes elected by the people, sometimes appointed by the governor, should have small weight.

MR. WHEELER [*continuing, in reply to a question*]: Our rule as to pensions was formally adopted by the board of regents two years ago, but it is five years old in practice. It simply states that a professor on attaining the age of seventy years, after twenty years of service in the university, shall be made professor emeritus, and receive two-thirds of the salary he was receiving in the last year of his active service. The money is taken out of the current funds. There is no special provision for it, but our finance committee has decided that it could be taken care of.

MR. MUNROE SMITH: The pension system was formally put in effect at Columbia in 1890, practically on the same terms as are laid down by the Carnegie Foundation, that is, after fifteen years' service, and after the professor has reached sixty-five years of age, half the salary. I have known a number of cases in which the value of the pension in retaining men at Columbia has been very marked. In balancing the respective advantages of different institutions simply from an economic point of view instructors have said, "This salary has much greater purchasing power than the salary I am now getting, but there is no pension." In one case a man took the trouble to get from an actuary the exact figures as to what it would cost him to buy an annuity on the same basis, and he was quite surprised to find how much more salary he was getting than he supposed.

As to there being anything in the nature of an eleemosynary provision from the Carnegie Foundation, there is no such feeling whatever at Columbia. It does not make any difference to us whether Columbia gets this money out of the Carnegie fund or out of the income of its real estate or from some charitable donor. Suppose some one had given Columbia a million dollars

for a Columbia pension fund, we should not feel that our pensions were alms. With reference to the very grave difficulties which it is thought will be found in getting money from the state legislatures for anything like a pension system, I cannot help thinking of the statement made before this Association, a couple of years ago, that the state universities were going to be a great deal more sure as to their financial future than even the most richly endowed private institutions, that in many cases their resources and revenues were bound to grow much more richly in the future. I remember also getting the impression that one of the principal influences used in bringing state legislatures to generosity was the argument of state pride. One almost certain way was to intimate that such an appropriation had been made by a neighboring state. If so, it seems to me that the argument which Mr. Eliot said had been used becomes a very strong one. If it could be shown to the state legislatures that the efficiency of their state universities was suffering because they could not get or keep the same sort of men attracted to private institutions because they had no pension system, I should think it would be comparatively easy to get them to establish a pension system or to increase salaries sufficiently to balance the want of such a system.

MR. VAN HISE: What was said two years ago at Baltimore referred to a very limited number of institutions which were able to carry on their work on a large scale. There are some that will solve the pension problem in some way. But the Carnegie Foundation provides for the granting of pensions to colleges with a four-year course that have as many as six professors and an endowment of \$200,000. Now of the thirty or forty state institutions a large part, while of this strength, have not yet won the confidence of their states. They have the long and hard struggle to go through which California, Michigan, and Wisconsin have gone through. Some are in the intermediate stage, still struggling to get anywhere near the point where they can perform the duties which they ought to perform to their respective states; and it is that group of institutions which I think will find it impracticable for the present to solve this problem for themselves in view of the extreme necessity pushing them for other things. And even considering the institutions which by sacrificing somewhere else can provide for retiring their professors, their resources are no larger in proportion to their opportunities than are the resources of the rich institutions of the East.

The question, however, should be considered primarily from the point of view of the great majority which are just starting on the upward path, and have a hard struggle of fifteen or twenty years before them.

In the South the state universities are with not a single exception needy institutions, very poor in proportion to their opportunities. It is wholly impracticable to take the question of pensions before their legislatures at the present time. They have not yet got to the point where the states have a pride in their institutions as a matter of course. They are trying to perform the simply enormous task of upbuilding that great section of the country, with obstacles on every hand, and practically that whole section is cut out of consideration by the present rule.

MR. JORDAN: The center of population in this country is in Indiana. Practically all the income of the Carnegie Foundation now goes to the northeast of that point.

MR. PAGE: I should like to mention a little observation of mine at the University of Texas some years ago. Application was made to public-spirited citizens for a new law building. They professed their desire to help the university in any way they could, but they said this particular gift would discourage the legislature from making the appropriations which it ought to make, whereupon the university authorities appealed to the lawmakers of the state. But they said, "Why,

you ought to be able to get the money for buildings from these rich men. If we make an appropriation out of the state income for that purpose you will then not be able to get from the state the money which you need for other things." I am afraid that is a good deal the way with regard to the matter of pensions. Those who are acquainted with the members of our state legislatures doubtless know that many of them study the conditions that prevail and the opportunities and possibilities as closely, or more closely, than university men, and that when they hear that there is a large fund of some ten millions of dollars, to provide pensions to university professors, each state law-maker is going to be anxious to get the institutions of his state on that Foundation, and he is going to postpone to the very last bitter moment the granting of any money for pensions, in the hope that the sentiment of the trustees of the Carnegie Foundation is thus going to be turned. So between these two lines of reasoning I think the state universities bid fair to get the worst of it.

MR. ELIOT: Mr. Carnegie had a purpose to accomplish quite beyond the supplying of pensions to teachers. He wanted to liberalize denominational institutions to begin with, to procure the abandonment of denominational bonds by a considerable number of institutions accounted denominational but which derive no real advantage or support from denominational connections. That influence seems to be already exerted quite strongly. Then it is conceivable that Mr. Carnegie's great benefaction should be used in the same manner, though the field is quite different, to procure improvement in the structure and management of what we have called state universities. It is perfectly obvious that state universities may be divided into several distinct classes. There are state institutions, for instance, in which the mode of appointing or electing the trustees or regents results in a board which is purely political in the bad sense. I know of three cases of governing boards of state institutions that had no sense whatever of their responsibilities and regarded the institutions as spoils. The president of one of the so-called state universities was recently summarily dismissed, contrary to the prayers, I may say, of the faculty and the students of the institution. The entire faculty was in another instance turned out by the governor of the state. It is conceivable that the influence of the Carnegie Foundation should be exerted to improve these low conditions in some state institutions resulting from the fact that the creation of these institutions is comparatively recent, and that the people of the states have not yet grasped the proper conception of a state university, that the general political condition of certain states is degraded. It would be a great service for the Carnegie Foundation if it were possible through excluding some state institutions to contribute to the uplifting of the whole class. This would involve discrimination; but such discrimination is not impossible.

MR. VAN HISE: I am sure that the committee representing the state universities would not have the slightest objection to any regulation which is thought proper in reference to these matters. Indeed, one president, whose institution has suffered from undue political influence, has expressed himself in favor of regulation of a kind which would exclude from the benefits of the Foundation institutions not administered from an academic point of view. A large number of most important state universities are administered strictly from that point of view. The method of selection of regents does not seem to make any great difference. In Michigan and Illinois they are elected; in Wisconsin they are appointed. Each of those three institutions is absolutely independent of political influence, but there are others in which within the past five years there has been political pressure which has not allowed the academic influence to be in control. This has been the case especially with the young institutions in the early stages of development, and any regulation which should exclude such political control would be gladly welcomed by the great group of state universities.

FOURTH SESSION

RELATIONS OF SALARY TO TITLE IN AMERICAN UNIVERSITIES

PAPER PREPARED BY PROFESSOR JOHN MAXSON STILLMAN, OF LELAND STANFORD JUNIOR UNIVERSITY, AND PRESENTED BY PRESIDENT DAVID STARR JORDAN

In this paper is considered the problem of the relation existing between salary and title, under the conditions ruling in American colleges and universities. What adjustment of these relations is most favorable to the effectiveness of the institution concerned? In general, three types of adjustment are possible. In one case, a fixed salary may be attached to the professorship and to each of the lower grades of rank. Next, each grade may have a fixed minimum salary, with a system of automatic increase with length of service, and for no other cause. The third relation is the one generally prevalent; the salaries in any grade are not definitely fixed, and increase of salary may be made at any time and for many reasons other than those connected with length of tenure.

The first of these systems aims, so far as professors are concerned, to establish a republic of letters, or perhaps an oligarchy of learning. It would develop a condition in which a man once chosen for a chair is responsible to no one but himself, and in which he neither expects promotion or fears its failure, because his character and work are judged by no president, no committee, and no executive board. The men in minor positions are professors in waiting, to receive recognition in case of vacancy or of departmental expansion. These again are held on an equality pending the opportunity to rise to greater responsibilities and greater remuneration. The second system is a modification of the first, with the added recognition of the fact that, with university men, the expenses of living increase with the years. The third system considers the problem from the standpoint of the efficiency of the university organism and of the actual value of the professor to his students. In it, the element of competition appears, and the greater pecuniary reward goes with the greater academic service. The first and second systems imply a static organism, a university with its form and scope fixed once for all, and the professors as incumbents of established positions. The third system is dynamic. It implies the growth of the university organism, and the value of personality as a factor in different phases of growth.

Taking universities as they are, the institution is neither a republic of letters on the one hand, as there are students as well as professors to be considered; nor on the other hand, does it find its homologue in a great business enterprise. It is not alone what the members of the faculty do, but the ideals they represent, which is important.

In the practical discussion of the first and second of these systems, we may assume that if promotion is impossible or automatic within the grade, the promotion from one title to another is not likewise automatic. In such cases there would be no possibility of any dis-

crimination between men of different value except by the difficult method of dismissal of such as fail to reach the plane of efficiency desired in the highest positions.

One of the most obvious arguments in favor of like remuneration for equal grades is that it relieves the university authorities from the difficulty of attempting to assign different money values to services extremely difficult, even impossible, equitably to appraise. No university president and no board of trustees, nor indeed any other body of men, can have the intimate knowledge of the values of the services of men in a university faculty adequate for the establishment of just discriminations in salary on the basis of service rendered. Even if we assume such intimate knowledge, we are at once confronted with even greater difficulties of establishing the standards of judgment as to the value of these services. The elements entering into the value of a university teacher are many; e.g., originality, scholarly productivity, teaching capacity, industry, energy, personal influence, character, executive capacity. Different men place the emphasis very differently on the relative value of these different qualities, and agreement as to their relative importance is impossible. Such being the case, discriminations in salary between men of approximately equal standing cannot be equitably administered.

When therefore it is attempted to establish such discrimination, there results dissatisfaction in the faculty. Faculty members criticize the discrimination in the light of their own knowledge of the men and their work and according to the emphasis they place upon their various qualifications. This engenders jealousies and gives rise to attempts to influence the president to recognize the claims of individuals, and cliques and factions are created. Stimulated by the uncertainties as well as by the possibilities of the shifting basis of salaries, political methods, personal influence, and "wire-pulling" become prevalent. Discontent, lack of harmony among the faculty members, and between faculty and president are the natural consequences. The president is charged with favoritism, and professors are accused of exerting undue influence on behalf of their own interests or of the interests of their friends or favored subordinates. I have endeavored to present this argument strongly, and we must admit that there is justice in the objections to the attempt to estimate closely the values of men by difference in salary.

On the other hand, if we admit that harmony would be promoted to a certain extent by the same pay to men of the same title, we must consider at what cost this harmony must be secured.

The above argument depends for its validity upon the assumption that the pay is an important element in the ambition and desires of the university teacher. It would be strange if it were not. Uniformity in pay, if it is to be a satisfactory condition, assumes at least approximate equality of value to the university. It is very evident that no such condition exists in any university faculty. In any faculty there are wide differences in the value of different men to the university, whatever criteria of value may be assumed. It is neither fair nor just to expect men of exceptional value to be satisfied with salaries paid to men of distinctly inferior academic value. There is injustice in not recognizing increasing

influence, scholarship and general usefulness by commensurate increase in salary. Nor should it be necessary to pay men of mediocre value the higher remuneration which is fairly deserved only by the strongest men.

If it be argued that none but men of approximately the same ability and value should hold the same rank, it can be asserted that such a condition is practically unrealizable, as may easily be verified by considering any given faculty. It is a matter of greater difficulty for a president and trustees infallibly to select the strongest men only for professors, than it is properly to appraise their services when in the university service. Appointees do not and cannot equally fulfil the hopes and expectations under which they were appointed, but once appointed they cannot be summarily dismissed to make place for greater men, so long as with a fair degree of scholarship, industry, and devotion they pursue their career; but there is no justice in paying such men the same as ought to be paid to those who are of distinctly higher value to the university and to scholarship. Furthermore, when a man by reason of merit attains a full professorship early in life, if he feels that thereafter with moderate attention to duty his salary is assured without hope of increase on the basis of value rendered, an important incentive is lost to him for his future progress and development. He is deprived of a stimulus to activity and ambition not without its influence upon common human nature even in academic circles.

There is also the more utilitarian idea of supply and demand which must be taken into account. No university has unlimited means at its disposal, and the problem of administration is to perform the most effective service for education and the increase of knowledge with the means at its disposal. To fulfil its responsibilities to its students and the public, it must secure and hold the most efficient men possible. If the law of supply and demand sets unusually high the value of the good men in certain lines, or the value of exceptional men in any line, it then becomes the duty of the university to pay some men salaries which it cannot afford to pay to all.

It may be claimed on the other hand that university teachers do not and ought not to enter the career for the commercial value of the position. The world offers other opportunities for those who seek large incomes, and the university teacher who is fitted for the work looks to enlarged opportunities for study, research, and to the love for his work as a teacher for the rewards of his success rather than to financial rewards. This is unquestionably true to some extent. Nevertheless, within the limits of salaries at present existing in the universities, the fact remains that university teachers are appreciative of and desirous of such increases in their remuneration as lie within the range of present possibilities in any university. Until the range of university salaries is distinctly higher than at present, university teachers will find that the maximum salaries paid in any institution are not so large but that they are compelled to deny themselves and their families many reasonable comforts and luxuries which are greatly desired by all people of similar culture and social status. And so long as this is true, the university must face the necessity of competing with the world outside for the services of thoroughly competent and ambitious men in many lines.

For the less wealthy universities, particularly, the competition for the best teachers would under a fixed salary scheme render it impossible for them to hold their strongest men, if to do so they were compelled to pay an equal salary to all holding the same title.

In consideration of all these factors in the problem, is it not probable that the gain of simplicity of administration and some measure of harmony in the faculty by the system of equal pay to equal rank would be made at too great an expense of efficiency?

We must not overlook the fact that if equal pay to equal rank were the rule, discriminations would still have to be made in the matter of promotions from one grade to the next. In promotions, not only the pecuniary consideration is concerned, but a public honor is conferred. Precisely the same variety of considerations enter into the qualifications for promotion as into salary differences. The same lack of agreement as to what relative weight should be given to teaching power, productivity as a scholar, personal influence and character, etc., exists here, and the same possibilities of jealousies, suspicions of favoritism, "wire-pulling" and personal influence. The writer is inclined not to lay great emphasis on the dangers of such influences as necessarily incident to either system under discussion.

Whatever discriminations have to be made into which enter estimates of the relative values of such services, whether by differences in pay within the same grade or by promotion, there is bound to be some dissatisfaction and discontent. A just and wise administration will reduce these evils to a minimum by inspiring the faculty generally with confidence in the fairness and general good judgment with which such discriminations are made. Entirely eliminated, dissatisfaction and discontent can never be. At best they can be confined to those members who differ with the constituted authorities as to the relative value of their services, and perhaps to their particular friends. Under either system these administrative difficulties will exist and remain the same in character, though differing possibly somewhat in degree. These difficulties will be lessened to a great extent by avoiding the making of small differences in pay between men of the same rank. For while the reasons may be readily apparent to the university community why a considerably larger salary must be paid to certain individuals, it will be much more difficult to justify small differences in salary to men of the same rank. For small differences in general usefulness or value to the university it will be admitted are not possible of fair estimation. They are not justified either on theoretical or on economic grounds. They tend toward discontent and irritation without material saving to the university treasury, and they cannot command the general approval of the university public. When certain men stand out so prominently as to deserve to be recognized by the authorities by a larger reward than their associates, the university community generally recognizes the fact, but the reasons for such recognition should be such as to be clearly recognized. Where, however, such is not the case, then equal pay to equal rank is the safer and fairer basis. The practical working out of the salary problem to my mind should be on some such lines as the following.

Each grade or title should have a minimum salary pertaining to it. This salary should be large enough to insure comfortable living with due regard for the reasonable demands of

cultured taste. Much discontent arises because the minimum salary of the various grades is often so low that men cannot live as the requirements of their profession and social status demand. This inadequate minimum compels the authorities to make advances of salary to meet personal necessities, which are not always justifiable on the grounds of relatively greater service rendered. Appointments to the lower ranks should be probationary, and the university should be considered perfectly free to terminate such positions, to continue them, or to promote to a higher grade in due time. Within each grade certain allowances of increase in pay should be made for length of satisfactory service. Above these minimum salaries there should be the power to advance the salary of any man when it is clearly for the interest of the efficiency of university work to do so. Generally speaking, the maximum salary of one grade should be less than the minimum of the grade above, though even here it is imaginable that a departure occasionally from this rule might become a justifiable exception. In each grade the authorities should have the option of leaving a particular teacher undisturbed at the minimum of his grade and time of service, or of advancing him in recognition of extraordinary ability or unusually valuable service. They must also have the option of promoting or of passing by any individual, according to his deserts or the university's needs. In the lower grades, below that of professor, while the deserving character of a member must be considered, it must also be kept in mind that the scope of the university work and the financial limits of the university may prohibit promotions even when fairly deserved. Even very good men must often look abroad for their promotions. In the higher grades it is assumed that permanency of position is reasonably assured, and this should guarantee the minimum salary of the grade and time of service without any presumption of further increase unless fairly won by unusual distinction and recognition; but the university should then be free to recognize such service freely both for the encouragement of scholarly ambition and to be able to retain its strongest men.

Briefly summarized, we may say that the maximum efficiency of the university work and a minimum of administrative difficulty resulting from inequalities in pay in the same grade, will be attained by a minimum of normal salary for each grade large enough so that men of reasonable desires may live and do their work and maintain their families without worry and discomfort; by reasonable increases dependent upon length of efficient service, and with freedom to recognize unusual ability or distinguished service as the requirements of the case may demand. Such recognition, however, should be made for reasons, the reasonableness of which should appeal to the university faculty generally.

Upon the assignment of this topic to Stanford University, President Jordan issued a circular letter to many presidents and faculty members asking their opinions upon the question "Should the same salary be paid to men bearing the same title?" At the time of writing some hundred answers have been received. The limits of time prevent the writer from obtaining permission to quote over their signatures the many interesting answers. I append, however, quotations from some of them that are typical of certain classes of answers and which will supplement the above brief discussion. Of sixteen

college or university presidents, fourteen are opposed to equal pay for equal rank, one in favor, and one answer is not decisive. Of eighty-one faculty members, sixty are opposed, seventeen in favor, four gave no decisive answer. Some thirty-three emphasize the value of an established minimum for each grade, increases above which may be made for good reasons as length of efficient service, unusual ability, or general usefulness.

The following quotations are from presidents of universities:

1.

I am firmly of the belief that there should be no rigid salaries payable to all men in the university bearing the same title. In other words, I believe that the university should pay what it thinks a man is worth. If a certain department is in need of a very eminent man, it would be wise for it to pay him double the salary ordinarily given. I believe that the principle should be variation, according to ability and experience, and quality of usefulness to the institution at any given time.

2.

In my judgment, while the salaries of professors in any institution will naturally gravitate toward some given figure, I see no reason why there should not be deviations therefrom, due to the greater value to the university of some men over others or the need of larger compensation to retain such men in the service of the university. In the case of assistant professors and instructors, who are appointed for a fixed period of time, I see little, if any, objection to uniformity of salary.

3.

Sitting in an easy chair, one can argue one's way with perfect satisfaction to one's self up to the conclusion that all men having the same title should have the same salary; but I have never been able to manage a university on that principle, and I have never been able to acquire such ability. Extraordinary things are always coming in to interrupt in the application of the theory. We have here assistants, instructors, assistant professors, professors, head professors, deans, president. Some of the instructors get as large salaries as some of the assistant professors; some of the assistant professors get as large salaries as some full professors. Where action is in our hands, we prefer, within reasonable limits, to increase salaries rather than titles. Sometimes, however, a man insists upon an increase of his title, and to refuse him means to lose him whenever a good offer comes from another institution. Sometimes it is possible to increase a title and to promise the increase of salary on and after a certain date when additional money is expected. Some men insist upon increase of salary more than upon increase of title, and vice versa. Sometimes you must increase the salary and title both.

I need not point out that the case does not occur in which an assistant gets as much salary as an assistant professor; nor a case in which an instructor gets as much salary as a full professor; but instructors and assistant professors do run together sometimes in respect to salaries; and so also assistant professors and professors in some instances.

4.

I beg leave to say, "No." The reason of the answer seems to me to be summed up comprehensively in the remark that men—even college professors—differ in character and efficiency. Therefore, the pecuniary recognition may fittingly vary according to their work and worth.

The individual and not the institutional method should prevail. It is much easier to administer a college on the basis of the same compensation for men of the same professorial grade; but I believe that such administration is not wise either for the individual or for the institution itself in large relations, or fitted to promote the higher interests of the whole community.

5.

I know of no solution of this problem which seems to me entirely satisfactory.

There are those who think that a fixed system or scale of some sort should be adopted and followed. That would be the easiest plan for the trustees and the president. Perhaps it is the right plan. But after the most careful consideration it does not seem so to me. I do not find any institution such as ours where any fixed system has been found practicable, though various systems have been given trial.

A fixed system of promotions and salaries is said to work well in the army—in time of peace. In time of war it is in the army as in all other callings—the system must go to make way for the most efficient service.

Aside from the differences between men, which count in every occupation and must count among teachers as well as others, there are circumstances and conditions which vary from department to department and render a fixed system a heavy handicap upon the maximum efficiency of the university. The university cannot, for example, make nothing of the fact that it is very much more difficult to get good men in certain departments than in others. In such cases the university cannot afford to restrict itself artificially by a system.

On the other hand the conditions and circumstances in another department may make it extremely difficult to promote every worthy man. The commonest example, in the universities generally, is that of the department whose places are already filled by a practically permanent staff of good men. If one looks at the case of a single individual, relief seems easy. But someone must look at all the individuals. Someone must look at the budget for the year. Someone must consider what the budget will be next year and in the following years when outgoes are growing and incomes are standing still. In a word, someone must consider the life of the university as a whole. When one does that, the problem of advancing all the individuals who deserve it appears not simply difficult but impossible. No university is rich enough to make places and salaries for all who deserve them. No university has a right to make place or salary for any man unless this is justified by the interests of the institution.

In fine, an automatic system is easy and peaceful. It relieves the trustees and the president from their most trying responsibility. But in my judgment it must again and again pay for this peace and pleasant irresponsibility by the sacrifice of essential university interests.

I believe that the trustees and the president must choose a harder and more troubled course. They must accept the responsibility of doing what they believe to be best and must abide the consequences to themselves and to the university.

I do not forget, as I write, the first-rate importance of a good spirit within the faculty. The maintenance of that spirit requires that the administration of affairs should be reasonable and disinterested. But if a reasonable and disinterested administration (which must often bring disappointments to individuals and which must sometimes make mistakes) does not develop a good spirit within the faculty, the whole problem seems to be hopeless.

6.

While there are diplomatic reasons for giving the same salary to men holding the same title in a college, there is no justice in it as it is impossible to secure men of equal effectiveness in their respective positions. The question of administration is doubtless easier if professors are placed on equal salary, but there seems no sufficient reason to my mind why the laws of supply and demand should not be applied to college professors as well as in other walks of life.

7.

. There is no reason why the same salary should be paid to men bearing the same academic title in other than the subordinate grades, such as assistant, tutor, and instructor. I think that assistant or adjunct professors, and more particularly professors, should be compensated as individuals and not as members of a group, the amount of compensation to vary in accordance with particular circumstances affecting the nature, the quality, and the amount of their academic service.

The following quotations are from faculty members:

8.

For a categorical answer to the question I should say, *no*.

The dilemma which the question involves is in some respects similar to that which appears in the question of salaries for public-school teachers, and is somewhat remotely analogous to that which appears in the whole problem of appointment, promotion, and salaries in the civil service. On the one hand a mechanical uniformity is easy of administration and shuts out the dangers of favoritism, wire-pulling, and the whole set of evils that are commonly described as political. On the other hand such a system makes it impossible to adjust the external rewards of service to differences of experience, capacity, and life-needs among those to whom the schedule of salaries applies. It may be taken for granted that there will be an upper limit of salary which will be low enough to prevent the position of instructor from becoming an object of covetous competition, and there will be also a lower limit which is not too low to enable a self-respecting man to live respectably. I can well understand that even within these limits there is danger to the scientific and spiritual interests of a university in a sliding scale which may seem to emphasize purely what may be called the market value of a man; but it should be remembered on the other side that a thousand differences of personal and family need, of general make-up and disposition, not seriously affecting a man's scholastic efficiency, and other differences too numerous to mention, are present and must be considered, and ought to be considered, when a man in a given institution is offered a higher salary in another institution, or in some other occupation for which his talents may fit him. Without entering into any unseemly competition on purely financial grounds, an institution may consider, and I think ought to consider, such differences, in adjusting the salaries of instructors within such limits as are suggested above.

There is not much danger that an instructor will work for money chiefly, or will get rich even if he does, but even in a university a man who renders services of extraordinary value should have a fair opportunity of receiving a larger income than another instructor of the same scholastic grade whose services are notably inferior to his. The difference in salary will not pay for the difference in service and cannot be made to pay for it; but it may render the more useful man a little more free to make the most of his useful life by travel, by acquisition of the means of culture and research,

and by the various other ways which are within the purchasing power of money; and it may render him better able to help his family and friends and those who have a right to look to him for help.

9.

(1) I do not think that "the same salary should be paid to men bearing the same title." But this under the following provisos:

(2) There should be a minimum salary for each rank, no less than which each appointee should receive upon his advancement to the rank.

(3) There should also be a maximum salary for each rank, attainable by those members of the rank whose abilities and performance show that they deserve it.

(4) Promotions within each rank should be upon proved merit, judged in the light of the quality of departmental work, and without reference to "university politics," or "work" in the manipulation of committees—in short, the study or the courting of "influence," whether with authorities or with students. The rate, or rapidity, of promotion should correspond to the proved value of research and teaching service.

(5) Advances in salary, as in rank, should be made in sole conformity with the advice of the president, and this advice should result from consultation with the department-head under whom the candidate serves, and should, unless there is clear adverse reason, follow the head's advice.

10.

My feeling is decidedly in favor of *equal* salaries, as tending to greater unanimity of feeling among professors, and so to greater loyalty to the university. Equal salaries seem to eliminate, so far as possible, the whole element of *favor*—the *personal* equation—and this sets every one free to do his best, according to his light, for the university. Equality, too, removes the possibility of bargaining, of jacking up or jacking down a salary, according to the exigencies of the moment. This policy, too, seems to me to be, in the long run, the more dignified for the university. A man comes to it, not because he is bought at a high price, but because the university *as a whole* suits him. He takes his place in the equal brotherhood of professors, feeling that his fortunes are bound up with theirs, and so with the fortunes of the whole university. . . .

Of course equality of salaries will occasionally prevent a university from securing an able man who might have been secured by "subsidizing" him—and it will result in some men being paid more, and some less, than the market will bear. . . .

Of course this preference for equality does not preclude an advance for years of service, so long as the advance, as at Harvard, is automatic, so to speak, and not a thing to be bargained for, or begged for. (I have heard of one interior university where advance of salary must even be "toadied" for.) . . .

And yet in the long run I am convinced that equality of salaries tends to contentment, to fraternity of feeling, to loyalty, and to the minimizing of the force of the mercantile spirit in a faculty. . . .

My argument is intended to apply chiefly to full professors, the "peers of the realm." There is no objection to a money stimulus to the men who are still on probation, with their spurs to win.

II.

1. It is necessary in my opinion to separate the college of arts and sciences from the technical colleges in the discussion.

2. If there were sufficient men who were *called* to teach in the sense that the old apostles were called for their work, then I believe that there would be no question of diversity of salary. All that would be needed would be barely enough to keep soul and body together.

3. While there are plenty who would like the call of a university there are not enough with "the call" to fill college positions. This puts the colleges in the field of competition with the practical world for the all-around, capable and forceful men who are not satisfied on the one hand with the dead level of communism or on the other with things as they are and have been. Progress and experiment to attain that progress is their motto. Now to get these men to put their courage and force to the service of a college, the college must offer them something like the chance they would have in the great world, that is, a chance to receive the reward to which their force and courage entitle them.

4. To obtain the men with the force and courage which shall make the university a real and living part of the civilization of the time, the university must—in a measure at least—appreciate the reward which is offered by the world for the kind of service it desires. There is no doubt that money at the present time is taken as the measuring stick of men. Money certainly makes it possible for men to attain much which is most desired by them and their families.

After men have once caught the divine fire which comes to the college teacher, money questions would not so much affect them; what I am contending for is that the university get the forceful characters into its faculty by offering rewards which will attract them. It cannot afford to be manned by those who cannot get a living so easily any other way.

5. Technical schools.—The same general statements may be made as with reference to the college of arts, but here the university comes into more direct competition with the practical world. If the technical school is to be an integral part in directing the progress of the civilization of our time the men who form its faculties must be among the chosen—men with strong character, clear heads, and the courage and foresight to make the necessary advances. Then the schools could hope to be leaders instead of mere trailers.

Now to get a sprinkling at least of the real leaders there must be provision in both salary and rank. And the salary in the technical school must average considerably higher than in the college of arts.

6. Just the method to pursue to attract into the teaching profession the all-around, forceful men so much needed in colleges may perhaps be answered by creating special positions with corresponding salary—such as head professor, dean, director, etc. This might leave the rank and file in a group with uniform salary and therefore without one element of discord.

7. In closing then I would say that in the modern university there must be diversity of salary and rank in each college and a distinction between the college of arts and the technical schools.

While it may not be germane, I would like to put in a plea for appreciation of the teacher who is really *called*. He after all is as much needed as the one who can do magnificently anything he puts his brain and hand to. Money is usually much less prized by him than opportunity for study, for investigation in his chosen field.

I2.

Apparently it is not practicable to pay the same salary to all men holding the same rank in a faculty, and yet any wide departure from this policy seems to work great injustice in many cases.

I once believed that a university president should be free to pay whatever salaries he found necessary to secure the men he wanted, and that salaries within the faculty should be based entirely upon efficiency. I have now come to regard the other extreme, with an absolute fixed scale, as preferable to this method.

No man is omniscient, nor can any man know with a higher degree of approximation the relative efficiencies of the men in a moderately large faculty. Even the men in the same department or in closely related departments differ widely in their estimates of any particular man. One lays the stress on one qualification and one on another. Hence, while no individual is competent to pass upon the salary scale of a whole faculty, no group of men will come to any agreement upon such a scale.

Most men are so constituted that their opinion of the qualifications of others depends largely upon their personal likes and dislikes (I know that I am personally very strongly influenced by such considerations); others are so constituted that they yield to persistent pressure on the part of one who is working for an increase of salary, and still others may be influenced by the cliques which are always formed in a faculty for the purpose of boosting their members. Hence, whenever a man receives a higher salary than others whom the general consensus of opinion would rank in the same class, there are apt to be charges of favoritism or "pull." In this way, the influence of the president who has the fixing of salaries is bound to be greatly weakened. . . .

Again, assuming that a man of absolutely impartial mind and of wide information could be given the authority to fix salaries, there is no general agreement as to the grounds upon which distinctions should be based. One man is an excellent teacher and exerts a great influence upon the lives of his students; another is a great investigator and does not know the names of his students. Which should receive the greater salary? Most men are neither great teachers nor great investigators, but one excels in some particular and another in something else. How shall we say which is entitled to the greater salary?

I am aware that absolute uniformity is impossible, even if it were desirable. Certain departments are compelled to pay more for men of equal ability and preparation than other departments. At any one time, there are living in the world only a few first-class men in any profession and a university which is able to afford the luxury of such a man should be compelled to pay for it. However, the total number of such men in the world is not large enough to make it necessary to take them into consideration in deciding upon the general policy of a university. So I believe that university salaries should, as far as possible, be fixed upon an arbitrary basis, taking into consideration the rank and time of service of the men, and that departures from this fixed scale should be made only for weighty reasons, reasons which would be recognized by the faculty as a whole.

13.

I may now say very briefly that I think university teachers of the same title should not receive the same remuneration. With such a plan I believe we would have too serious an interference with the great law of supply and demand. In our academic guild there are already too many impediments to the free working of the law of the "struggle for existence and the survival of the fittest." The principle of the "redemption of the unfit," which our too pious altruistic brethren are introducing as a counter law to the law of evolution, is being overworked in these times.

Everywhere in life, a man should be paid what he is worth. I know that many of my colleagues

say that this would introduce commercialism into university life. It is often said that university men cannot do their best work if they have to be continually thinking about their salaries. This is in one sense profoundly true, but I believe that it is often the argument under which idlers take refuge.

14.

Fundamentally, a sharp distinction must be recognized between the academic and the administrative requirements of the institution. This underlies the question at issue. The university is required to exist in a commercial world, and meet financial conditions on a commercial basis, while, at the same time, it must meet its obligations to the ideals for which it stands. The university thus is forced to maintain its standards at variant costs, and direct its progress by paying prices that it does not itself control, when they are disproportionate to the true academic returns. This is because of the outside standards of value, which do not accord with the necessary ones within. The discrepancy holds true for every item of expenditure, and among the other items, are included the salaries.

There then arise two classes of considerations for which salaries are paid. One is that for services which perhaps have little or no commercial value, rendered by persons who are thoroughly dependent upon college interests and college standards. The other is for services purposely attracted away from commercial competition by liberal payment. The two classes, or purposes, are separate and must be regarded separately: for they are made necessary by different causes, they administer to different needs, and they bring about different results. One is strictly academic, and the other is thoroughly commercial; and each is a factor in practically every salary.

The true academic purpose is steady, continuous, uninfluenced directly by commercial considerations. Such services are easy to grade. Salary in that case conforms closely to title; and acting with title it becomes an expression of university approval and merit.

Commercial considerations, however, can not be bounded so. The commercial purpose is fluctuating, insincere in the college field, and rests upon a commercial basis and outside standards. It is always subject to influence acting on the outside, and these break into any desirable order of things within.

Therefore, when necessary, commercial influences should be met according to their demands, not restricting or limiting the power of the university to do this, but observing its best interests while protecting its standards. The salary is the means that makes the fulfilment in that case possible and is the only compensation the college can afford to offer commercialism. It could be shown, on the whole, to be unwise for a university to go far into extreme commercial competition for men, and deal in such commercial margins upon men as have accrued from popularity, or from success in some one line of commercial enterprise.

Thus salary, in part, must be held under a commercial standard, while title always must be considered under an academic one. The two standards do not conform, and no effort could draw them naturally together in defiance of commercial law and custom. A uniform scale of salaries, graded according to title, or defined by the title, is an ideal to be approached as closely as outside conditions will permit. Such uniformity, however, is not sufficiently supple for working purposes; and for practical reasons, the best results are obtained by a moderate departure from it in different ways, limited not by defined bounds, but by conservative administration, retaining always the ideal in view.

15.

Let me say in answer to both questions that I think the same salary should not be paid to men bearing the same title. There should be an identical minimum salary to be paid to all men bearing the same title with such additions in individual cases as the university may deem wise, in order to recognize the moderate natural increase, up to a certain limit, which ought to be given to all members of the faculty who do faithful service, and the exceptional increase which ought to be granted to men of exceptional value.

16.

The question strikes me as scholastic.

University organization cannot be modeled upon the army. The best interest of university service prohibits that it should be enterable only at the bottom. University professorships high and low should be open to competition. Professors do not need the shelter of benevolence nor to be entrenched behind the contract system of benefactors. Universities should be free to get the best men their resources will command. Hence no rigid connection between title and salary roll is advisable.

17.

I beg to offer as my opinion : That the same salary should not be paid to men bearing the same title. I feel that in the lower grades of the instructing force different sums should be paid according to the character and amount of work. In the grade of instructors, assistant professors, and associate professors I think there should be a minimum and a maximum limit—that in general, advancements, or appointments should be made at the minimum figure, and there should be a regular automatic increase in those salaries until the maximum limit is reached; then it may be desirable to retain the person at that salary either permanently or for some time, until he has shown his qualifications to be raised to the next grade.

When it comes to the full professorships, I think again there should be a minimum salary, and that the advancement to what might be termed the "regular" salary of full professor should be, as in the lower grades, automatic and regular; that above the regular salary there should be exceptions made upon the sole consideration of the value of the individual to the university. That means discrimination, and I believe in discriminating between the good, the mediocre, and the bad.

18.

It seems to me the fairest method is that a certain minimum salary should be attached to each title and that the appointment to such a place would necessarily carry with it this minimum salary, but there should be possibilities of individual increase over this minimum. The factors which should determine this differential are various. The success of the professor in his particular field, either as a teacher or as an investigator, or as a leader of public thought, or interest in university activities should be followed by some recognition in the way of increased salary. I am afraid that if promotion were simply a matter of time or routine, there would be a distinct lowering of effectual effort for advance. The more highly one prizes an academic grade, the greater should be the possibilities of this differentiation.

While academic life is not strictly comparative with business life, they should have certain analogous elements. It is easy to get one thousand dollar men in business, much more difficult to get five thousand dollar men, and almost impossible to get ten thousand dollar men, but a ten thou-

sand dollar man is worthy of his hire. So in the university, the ten thousand dollar man should have his corresponding reward. Of course, the elements which make for success in an academic career are not the same as in a business career. The standards are different, the aim is different, but what I want to bring out is that the value of men is so different that they cannot be fairly classified by the ordinary academic grades, and, while in the university the money reward is not the sole object of the professor's work, it should form a certain element of it.

19.

In my opinion professorships within the same university should unquestionably be placed upon a like financial basis.

I find the most emphatic argument for this in the evils that almost inevitably accompany any other disposition. Those evils, indeed, seem to me a most serious menace to the amelioration—so much needed—of the professor's standing. In the absence of such a system or practice, the individual professor is likely to spend serious efforts in enforcing his claims to securing such advances in salary as he can effect. Most directly and most frequently he encourages offers of affiliation with other institutions. He particularly suggests when such inquiries come, the necessity of additional financial inducements to secure his transfer; at other times the university aspiring to secure his services at once holds out the lure of additional income. If he accepts such an offer, he is likely to find in the new environment that he has been engaged at a salary denied to many of his colleagues of longer service, of greater adaptation to the needs of that institution, of equal reputation and attainments. Such a position should be more generally embarrassing than it seems to be. If he declines the overture, he is likely to yield to the temptation to demand of his present authorities that they compensate him for the loss he has incurred by declining the "call." The commercial standards that thus enter degrade the proper appreciation of academic standards and prevent the emphasis upon the essential factors of academic compensation. There are today many men of first-rate character and value receiving most inadequate salaries, while in the same faculty are a few men with far better incomes whose greater freedom from care is due merely to the fact that they entered the institution at a later period of its history and have not to their credit years of self-sacrificing service. Such a university actually punishes those who have aided to build it up. It may be replied that this difficulty could be avoided by increasing salaries from within as generally as from without. I reply that the spirit of this method is against such procedure; and that a complete adjustment would amount to nothing less than an equality of salary.

I shall say little of the feeling of personal injustice, of jealousies, small and great, proper and improper, that arise under the system that allows each man to fight for himself alone. I mention the fact that struggle against it as we will, men will be rated by the salaries they receive. Academic democracy is hampered in its expression, and men are judged by false standards. It is but an exaggerated expression of this attitude—something that hangs in the air and contaminates—that induced more than one graduate student in a certain but nameless institution to look up in the proper report the salaries of the several professors under whom study was contemplated, and to choose those with the largest figures to their credit. They wanted their "majors" only under at least "\$3,000" men. This is the rating that figures in the Sunday issues of our great and representative dailies.

The fact that the only practicable mode of avoiding the inevitable difficulties, injustices,

inequalities, and pernicious influences of a system that leads each man to struggle for himself, is to adopt the system of equality; this alone seems to me an adequate reason for the system I advocate. Yet it seems to me that equally with the avoidance of evils is there in the "equality" system the greatest good, alike in principle and in practice. The very freedom from care and unrest and uncertainty, and the consequent emphasis placed upon the incumbent's devoting himself to his proper interests, is a great step in itself. Nor can I see why any president or board should desire to complicate matters by attempting to differentiate among equally, or nearly equally, worthy men by a financial standard. It is sometimes said that the business of a president or of a board is to translate academic utility into money values, a task for which a composite of Solomon, Job, and Socrates would be inadequate. The thing is an obvious impossibility, and, as said before, a crude attempt to force the distinction places a most undesirable emphasis upon a distinction that fundamentally has no place in the academic life. The very fact that a president is willing to prove to his board that Professor A. is worth \$2,600 to the university, while Professor B. is worth \$2,700, seems to suggest rather forcibly that the result might better be left to the throw of a die.

We must also remember that under present circumstances these discriminations may mean all the vital difference between finding a debit or a credit in the year's accounting. If professors were paid upon an adequate basis, the problem would shift in importance, though the relative value of principle would be the same. A salary should secure a reasonable, comfortable living. The salary is intended to permit one to live and pay one's bills; those bills are largely determined by the standard of living. The butcher and the baker—unlike the graduate student—do not consult the salary list before making out their bills. These come in to the fortunate and the unfortunate alike.

Nor can I see any useful purpose that a differentiation of salary serves. I have never heard any defense thereof that at all aims to set forth its utility. It is generally set forth as a practical necessity. A certain man can be had only by offering him a certain salary. Trustees are influenced by these superficially business-like considerations; and so the specious argument with its attendant evils returns and grows in force. Yet in the long run, the university that strains its maximum efforts to pay adequate salaries will reap the benefits of its worthier policy. Indeed that is the case today. To anticipate the occasion of a summons elsewhere, to place the emphasis upon academic privileges, to make it clear that the best the university can do is already done, and is not withheld until a "hold-up" forces the situation, is more likely to attract and retain the proper kind of man than any shrewd juggling with the translation of academic deserts into dollars and cents.

I do not address myself to the practical problem—related yet different—of providing a system for the proper advancement of men from subordinate to the higher positions. I believe the issue in such cases is properly that of determining by academic standards when and whether the candidate is to be advanced to a higher rank. Some should be advanced more rapidly than others. Such differentiation is part of the selection that is as necessary in the academic as in any other career. But once selected, the further differentiation of salary should be affected by no other consideration than time of service, and such other regularly provided conditions as belong to every man's career.

20.

As an ideal, the payment of uniform salaries to all who may bear the same title would seem highly desirable, inasmuch as it would in effect recognize the equal value or importance of one department with another.

As a matter of practical university administration, it will always be difficult to realize any such ideal, and chiefly for these reasons:

(1) While all professors should be equally eminent in their respective professions, such will not be the case in any actual faculty. Certain individuals may tend to stagnate, others to draw forward, and in various ways differences are sure to exist.

(2) As a result of these differences, either in professional or in collateral qualifications, it will result that in a real sense, certain individuals may become of more value than others, no matter on what basis "value" may be estimated. Such differences may not improperly be made the basis of a difference in salary.

(3) Due to one cause or another, the services of different members of the same grade of the teaching staff may have different market values. Certain individuals may be more or less prominently before the public, or may receive calls from other institutions, and if it is desired to retain their services, an advance in salary must be made. . . .

To summarize: if universities could be provided with ideal faculties and administered under ideal conditions, doubtless equality of salary in the same grade should and would prevail. Under actual conditions and as a practical administrative problem it does not seem likely that it ever will.

21.

I am strongly inclined to think that men bearing the same title in a given institution should receive the same salary or what would be better, if practicable, that there should be a fixed scale of advancement by years so that new appointees could start in at the bottom of the scale and receive a regular increase of salary until a certain maximum is reached. It might be necessary to recognize services in other institutions at similar grade in adjusting the pay of men changing from one full professorship to another. To give satisfaction such a sliding scale would have to be administered uniformly, and the practice of withholding the expected advance in some cases and in making it in others should be strictly debarred, otherwise members of a faculty would feel themselves perpetually under trial, and while this might stimulate a certain feverish activity, it would not promote the efficiency of the body as a whole. I believe the healthiest system and the one which would lead to the finest *esprit de corps* to be that of uniformity of pay; the salary in the case of each institution to be of public knowledge. A sliding scale of annual increase which could be relied upon would be satisfactory to the younger members of the staff and peculiarly advantageous to those who remain in service for a long period of years.

Such a system would do away altogether with the present very objectionable practice of trying to obtain offers from other institutions, not for the purpose of accepting the same, but to force an increase of salary in the position which one already holds. At present this is in many institutions the only successful way of improving one's condition as regards pay.

Such a system as that outlined, however, should be so arranged as not altogether to discourage migration; for, aside from mere monetary considerations, it is doubtless better for the universities and their professors to have a certain reasonable amount of change of personnel on the one hand and of environment on the other.

It might possibly be found necessary to pay higher salaries in departments which come into touch with practical life such as the chairs in engineering, architecture, medicine, and law, than in the case of purely academic positions, because of the demand outside of the universities for men fitted

to fill these positions, but such a distinction is unfortunate and should be avoided if possible. If a man conversant with practical affairs selects a university career he does so necessarily at a pecuniary sacrifice, and it is perhaps not too much to ask him to be content with the same pay as his colleagues in other departments.

22.

As regards instructors in different schools, or perhaps even in different departments of the same school, some variation seems necessary. Experts in law, medicine, or engineering, even though of no greater relative prominence in their specialties than teachers in the so-called academic departments of the university, must ordinarily be paid higher salaries than other teachers, simply because a sufficient number of first-class men cannot be gotten away from the competition of active practice in these subjects for salaries that will procure good teachers in the academic departments; otherwise, indeed, a university proposes to pay the academic teachers on the basis necessary for the professional ones, which is not likely to be the case. I assume, therefore, that the practical question for discussion is whether there should be variations in the salaries paid to men of the same rank in the same school or similar departments. Ordinarily, I should think it preferable to pay the same salary to men bearing the same title and doing work similar in amount and general character. Where a university's funds are reasonably adequate to the work it is attempting to do, this seems the best way of preventing jealousies and dissatisfactions which are very natural where there are marked distinctions in salary among men of the same rank. At least this is true among professors and associate professors, though the reasons for it are not nearly so strong in the case of temporary appointees like instructors and assistant professors. A variation of salary within certain limits may here often be proper and useful in enabling the university to retain a good man whom it cannot immediately promote to the higher ranks. In any case, however, I should think it proper for a university in rare instances to pay special salaries to men of extraordinary abilities. The salary of a professor is not large at best, and a university teacher with an opportunity to earn a much larger sum outside of the university might occasionally have duties that he felt obliged to discharge which necessitated a larger income. If his value to the university were very great, I should think it proper for the university to retain him by special arrangement, but such cases would be very few in number.

Institutions whose income does not enable them to employ the usual number of full professors at salaries paid for good men by the larger universities must necessarily choose between having all the men in a department below the first rank, or trying to have at least one first-rate man in each department who shall be paid a substantially higher salary than the others. I should think it better for an institution to pursue the latter policy; but it would be difficult for such an institution to retain its better men, even of the second grade, if it never advanced any of them to the rank of professor except the heads of departments. The title of professor is looked upon by a considerable number of excellent men as a substantial promotion even though unaccompanied by much increase in salary; and I should think it proper for a university with a moderate income to act upon this known fact of human nature. I am pretty sure it would be able to retain better teachers, in the long run, this way, and that is the principal object to be gained by salary rules. Perhaps even such a variation as that just suggested could be made the subject of regulation by constituting heads of departments a higher class than full professors.

23.

As there are many different degrees of worth, or value to the university, among the men of its faculty, and as but a limited number of these degrees is represented in the usual scale of titles composing the faculty organization, I should say, decidedly, that the same salary should not necessarily be paid to men bearing the same title. The differences in salary should correspond as nearly as possible and expedient to the differences in degree of worth of the men to the university. The factors determining this worth are several and various. Some of them appeal primarily to our ideal professional qualifications; others appeal more to our recognition of the practical necessities of university administration. Theoretically, the ideal qualifications should be the preferred and most rewarded ones; actually, both categories of qualifications must be taken into account. But there is no scale of degrees of worth determined either on the basis of ideal qualifications alone, practical necessities alone, or (as is inevitably the real basis) of a combination of these two, that does not include in its series more degrees or gradations of importance than are represented by the conventional scale of faculty titles or positions. These degrees should be recognized and rewarded by differences in salary, even though they cannot be by differences in title.

24.

I believe there should be a minimum standard of salary for a given title, but that the maximum should be varied to suit the class of men engaged in such work. *Many valuable men deserve an advance in salary before they deserve promotion in rank;* in fact, some exceedingly helpful men may never deserve a high rank as to title, but become increasingly useful as members of the teaching faculty. It is my feeling that a professorship should not be awarded simply and solely because of scholarly attainments or ability as an investigator; the title has a greater content than these qualifications imply.

Under the present economic condition the salaries now being offered to college workers are so meager as to offer no incentive to young men of ability to enter the profession. Of course, many young men of ability are entering it, but they are doing so with no hope of any financial reward, and many of them are not conscious of the difficulties that await them. It is easy to say that the best men are willing to make sacrifices, but it is not so easy to see that the sacrifices which they are called upon to make are many times serious detriments to their advancement. For example, comparatively few men in college work, relying wholly on their salaries, can afford to hire a stenographer or reader to do certain amounts of detailed and more or less mechanical work. This is not as it should be. Much more time could be given to investigation, and they would have more desire to investigate and devote their energies to essentials, if they could be relieved of the purely mechanical work. At present, as I say, relying wholly upon their salaries for support, this is practically impossible.

In conclusion: people of the country are, in general, of the opinion that college professors are poorly paid, hence there would be no serious objection on the part of the public to a change for the better.

25.

The titles do not represent ranks of men in military alignment, but a group of runners spaced out yonder on the track. Our hope is to space them out more widely still by evoking from each best

one his utmost effort and speed. A prize—of some sort—is what human nature demands in all such cases. “To him that hath shall be given” is never truer nor more just than here. Now the title itself is a prize. But the title of itself affords no further inducement to him who has already won it; and for those of the highest academic rank no further prize of that sort is possible. But this last is precisely the group that most needs such stimulus.

To rely upon the desire of fame alone to furnish the needed spur seems to me not quite all we may rightly do. Fame depends upon too many accidents, and generally comes too late to avail the individual for further effort. It seems, moreover, not quite fair that the world generally should be left to pay the debts of the university for exceptional service rendered first of all to the university itself. The evils which are feared in this connection—bitterness, jealousy, and the charge of favoritism—are already here, and will inevitably attend any attempt to recognize excellence. The way to deal with them is neither to efface distinctions already established, nor to refuse to carry them further as may be needed; but rather to make sure that every such recognition of excellence shall carry with it the conviction of its essential justice and desert. I see, therefore, no reason why the principle of special reward for special service, operative everywhere else, should be made inoperative within the charmed field of a certain academic rank. To make it so suggests at once the methods of the “union” and its results—loss of incentive toward excellence because mediocrity will answer just as well!

And I make no question of recognition of a pecuniary sort. Added pecuniary resource here is not so much *payas* it is a necessary condition of further and continued effort; relieving the scholar's mind from carking cares, and his body from profitless fatigue, and setting free his energy to do its proper work. Nor should it be necessary for a man of proved value and ability to work for a position elsewhere, in order to come into the enjoyment of what he has deserved at home.

A graded use of salary during the two or three years of one's novitiate in the professorship—if the man has it in him to rise at all—seems almost the only proper thing—and works well in practice. The associate professorship seems not so distinctly to need an augmentation, since it should lead betimes to the next stage. But in the last stage the principle of recognition of exceptional quality, I think, should have large sway.

26.

In order to answer your question, two things must first be clear, *viz.*: (1) The basis on which salaries are fixed; (2) What is implied by the same title?

As to the first I may express the fairly obvious belief that salaries should be the pecuniary compensation for services rendered. In practice, however, the salary question is frequently complicated by the introduction of other matter. In fixing salaries the only condition should be “value received.”

Assuming this, if the same title truly indicates equal usefulness among the men who hold it, I believe that equal salary, equal compensation, is both logical and just. But unless men equal in rank are also equal in usefulness, I do not see that equal compensation is justified.

I may therefore state my opinion regarding your question in these terms:

1. Salaries should be compensation for services rendered.
2. They should be fixed only according to services rendered.
3. The salary of an individual should therefore be determined solely by his usefulness.
4. Unequal usefulness of men in the same or in any rank should necessarily imply unequal salary.

27.

Equality of salaries would presuppose at least approximate equality in scholarship; but there are very few universities in this country that have reached that stage. In other cases a uniform salary scale would seriously hamper the appointing power in its efforts to secure good men, especially in universities that are at a disadvantage in consequence of their geographical location or for any other reason; unless indeed the salaries be placed at the maximum figure obtaining anywhere, and that is obviously impracticable.

28.

In general, I think that it is not just to pay the same salary to all bearing the same title. It seems to me that there are at least four reasonable grounds for such discrimination: (1) Relative success in teaching; (2) Relative success in research or in otherwise contributing to knowledge; (3) Various personal qualities not easily defined, but going to make up character and culture, and manifested in the teacher's influence for good on the student; (4) Length of experience. If the teacher does not grow, he should not remain in the university. If he does develop from year to year in such qualities as those referred to above, it is right that he should receive better pay.

I most emphatically do *not* believe in salary discrimination based on a "commercial" valuation obtained from the demand for the teacher by other institutions—a condition which already exists to too large an extent. When the laws of supply and demand govern the salaries paid our teachers the influence of our universities for good must certainly suffer. We should see such results within the faculties as now exist on the campus—an able teacher of Latin, let us say, of high character and long training, and successful as a teacher, getting perhaps \$1,000 or \$1,200, while a recent graduate, of doubtful character, can command \$5,000 for six weeks' work as football coach.

29.

I am distinctly of the opinion that we are too careful in differentiating officers of the university according to age and title rather than to ability, activity, and general usefulness.

Universities are lax in encouraging young men to leave the university when they are not fitted, and at the same time American universities seem to be equally lax and short-sighted in disposing of older men who in their prime were a great help and honor to the university. The modern trust is much more human in these matters, and it seems to me, takes better care of its good men.

Salaries should not be paid in amounts proportionate to arbitrary gradations of title. When a man has proved his usefulness to the university, the university should be willing to pay him any reasonable salary to retain his services.

30.

A member of a university faculty is likely to put more life into his work, if from time to time he should receive some definite recognition of excellence to which he may attain, whether in teaching, research, executive work, or length of honorable and efficient service. This recognition may come to him in a variety of ways, one of which is increased remuneration. It is desirable that such encouragement should be given him more often than he could be promoted from title to title, for a complex system of titles would be unwieldy. Therefore a minimum and maximum salary should be established for each title, a man being advanced, now within his title, now from one title to another, as he shall merit.

**SHOULD MEN BEARING THE SAME TITLE IN ANY INSTITUTION RECEIVE
THE SAME PAY?**

PAPER PRESENTED ON BEHALF OF THE UNIVERSITY OF MICHIGAN BY
PROFESSOR H. B. HUTCHINS

I doubt if I have anything to contribute to this subject that will be of special interest. Practically the whole field has been covered by the paper read to us by President Jordan. However, as we approach the question from different points of view, it is possible that there may be excuse for a second paper.

I shall assume in my consideration of the question that it has reference to institutions of the college or university rank. I shall assume also that those proposing the question had in mind the discussion of the subject of a general discrimination in salaries upon the basis of merit.

I suppose that there is at the present time in most universities discrimination to a limited extent between men holding the same title. In some cases it is based upon length of service; in others, it is made in favor of men who perform extra duties. Sometimes, moreover, special endowments lead to discriminations. And occasionally the salary of a man is fixed above that of his associates in order to retain his services when he has been called at an increased salary by another university. Sometimes, also, special and exceptional circumstances put a man in a different class from that of his associates, although he may have the same title, and his exceptional position is recognized by a difference in salary. This happens not infrequently in professional schools, where a man in accepting a professorship, makes a pecuniary sacrifice, or where his standing is such as to make the securing of his services particularly desirable. Or it may happen that there is a discrimination because some of the men are engaged in outside professional work. In each of the cases mentioned, there is a definite reason for the discrimination which serves as a basis for the fixing of compensation. Although causing undoubtedly some friction and criticism, discriminations like those indicated are not subject to the objections that may be urged against a general policy of discrimination, and their wisdom and propriety are, I think, generally recognized. If we eliminate the cases to which reference has been made, it may be said, I think, to be the general custom in American universities to pay the same salary to men bearing the same title. Should the custom be continued, with the exceptions mentioned, or should there be a general policy of discrimination based upon merit? Or, to put the question differently, should the money value of the services of the university professor be fixed by the arbitrary standard of rank, or should it rather be determined by the same standards by which the value of services of like grade in other fields is determined?

If we were to consider the question in the abstract simply and without any reference to its practical side as connected with the business of administration and its ethical side

as connected with the attitude and aims of those who follow the academic life, we should have little difficulty, I apprehend, in concluding that the arbitrary standard of rank has little either in reason or equity to justify its existence, or continuance. The argument usually made appeals to one at once as logical and sound. It is to the following effect: In the outside world professional recognition can be gained and professional advancement secured only by individual effort. Here the income of the professional man is not fixed by an arbitrary standard but depends upon his ability to accomplish results. He realizes that the pecuniary rewards of his calling will be measured by his efficiency; that if he can do only ordinary things, he will receive only ordinary returns, but that if he proves himself equal to unusual and difficult situations, he will go to the front in reputation, and win the pecuniary rewards that the profession yields to the successful. He has before him as incentives the honor of professional distinction and the substantial compensation that such distinction brings. In the field of business and commerce, where the large enterprises of the day are attracting some of the best intellect of the times, the rewards are for the man who can bring results. Wherever initiative is required, wherever constructive ability is necessary, in a word, wherever the grade of the service is above that of the purely mechanical or routine, arbitrary standards of compensation are practically unknown. The great corporation, for example, whose business interests require many representatives of the same rank whose duties are of the constructive sort, compensates such representatives not, as a rule, according to rank, but according to the ability of the representative to produce results in the particular field to which he is assigned. It is the man and what he is to the business or his particular part of it that are the determining factors in the fixing of compensation. But illustrations are unnecessary, for it goes without saying that in the activities of the world, the worker in the higher grades of service, except in the public service, receives, as a rule, such returns for his labor as his ability and attainments can command. Here no arbitrary scale of compensation either bolsters incapacity and indifference or handicaps ability and industry. Every man is taken at what he proves himself to be worth. It is apparent, moreover, however much we may deplore the fact, that the opportunity for increasing pecuniary returns constitutes the chief stimulus to the individual worker, whether in the professional or business field.

That the conditions suggested exist in practically every department of intellectual work, and that they are at the present time generally recognized as natural and proper, cannot admit of doubt. No one would for a moment advocate that the pecuniary returns for such work should, upon principle, be controlled and limited by arbitrary standards. It would be objected at once that such a policy would be an unjust interference with the rights of the citizen, that it would stifle individual effort and encourage mediocrity. And such objections would not be without a basis in reason. If it be justice and equity, then, that, in the activities of the world, the intellectual worker be left free to reap such pecuniary rewards as his ability and acquirements can command, why, it is argued, should not the same privilege be accorded to the teacher? The calling of the teacher is obviously intel-

lectual. It must be ranked as a learned profession. To prepare for it under present conditions is quite as expensive and quite as burdensome as is the preparation for any of the other professions. It goes without saying that among teachers of the same academic rank there is nothing like a dead level of ability, industry, and attainment, and it necessarily follows that there must be differences in the quality of the service rendered. It is in the nature of things that this should be so. The leveling influence of rank is in name rather than in fact. It can never equalize efficiency. It follows, therefore, that among men of the same rank, some are contributing vastly more to the life and influence of the university than are others. Why, it is argued, should not this difference in efficiency be recognized by a difference in compensation? Why, for example, should not the profound scientist whose fame in the field of research has brought to the university its chief distinction, receive compensation in some degree commensurate with the value of his services? Or, to put the case differently, why should his income be controlled and limited by the fact that his moderately endowed and easy-going associate in the same field happens to have the same academic rank?

It must be conceded, I think, that the *a priori* argument pure and simple leads inevitably to the conclusion that in the university as in the world the measure of value for services should be ability to accomplish results, rather than the arbitrary standard of rank.

It is frequently urged, moreover, and the claim is not without some basis in fact, that the present system favors mediocrity and encourages indifference. Undoubtedly the academic life under prevailing conditions offers opportunities to small men. It is probably true that the faculty of every American university has upon it men who could never meet successfully in the world the test of keen intellectual competition. Some of these have been attracted to the life by the mistaken notion of special fitness, but others unfortunately by the knowledge that academic recognition in the form of a professorship means a reasonably secure position, generally recognized as honorable, with a fixed and certain income. Why, it is argued, should the university man be sustained in his weakness or indifference by a support that is so largely factitious? Why should he not be compelled, like the professional man in other fields, to stand upon his merits?

It is sometimes claimed, too, though, as I believe, without substantial reason, that if there were a free field for competition in the matter of salary, many desirable men who now enter other professions or callings would be attracted to university life.

While from the theoretical point of view the university teacher is probably entitled to the same opportunities to compete for increased compensation that are enjoyed by men in other intellectual pursuits, and while it must be conceded that the present system has a tendency to attract weak men to the calling, and to encourage indifference, yet that a radical change in policy, even if it were feasible, would be wise, I cannot bring myself to believe. First let us consider the practicability of a general change to what may be called the merit system, under which the pay of the instructor would be determined by the character and results of his work. Would such a system applied generally be a workable

one? Would it secure an equitable adjustment of salaries? It goes without saying, of course, that some plan would have to be devised for ascertaining the money value of each instructor to the university, and that authority to decide the question would have to be given to some officer or board. In the professional and business fields the problem is not a difficult one. Here it is purely a matter of contract with conditions present by which a satisfactory adjustment of compensation can always be made. The service being essentially private and being definite in its character, extent and results, its value is easily ascertained. Each case furnishes the necessary data for an agreement. The pay of the lawyer, for example, is fixed by contract, either express or implied, between himself and the client. The amount depends upon the character of the service rendered, the time consumed thereby, and upon the recognized professional standing of the party employed. Here we have something definite and tangible as a basis for compensation. So as between physician and patient, there is definite service, rendered for a particular purpose, the value of which is easily ascertained by recognized standards. The corporation, through its board of directors, fixes the compensation of its officers and representatives upon the basis of certain and definite service to be performed. It is apparent that the conditions necessarily incident to private service rendered for a particular and definite purpose must always furnish a basis for the fixing of the value of such service. But do similar conditions characterize the service of the university instructor? I am very sure that they do not. He is engaged, of course, to teach a certain subject or certain subjects. The relation between him and the university, so far as form is concerned, is certainly one of contract, but excepting in form it has about it very few of the conditions that characterize the ordinary contract relation. The relation has about it elements that in reality take it out of the ordinary field of contract. But considering it simply as one of contract, what would be the problem of administration under a general merit system? It is apparent, as suggested, that the money value to the university of every man upon the teaching staff would have to be determined. But how would it be determined? What data could be used as a basis for fixing this value? Could the number of students instructed by each professor be taken as a basis? Obviously not. Such a course would be unreasonable and would lead to inequitable results. Some subjects are fundamental and are necessarily taken by large numbers; others are special and are only taken by the few whose interests lie within the narrow field of the specialty. It certainly would not do to conclude that the man teaching the fundamental subject that students generally must have, should be paid a larger salary than his associate of the same rank who teaches a limited number in a specialty, for we would thereby, if the men concerned were in all other respects of equal value to the university, be making the subject and its necessity or attractiveness to the student the test of value rather than the merits of the instructor. If it be claimed that under the elective system this conclusion would not follow, it may be replied that even here the personality and capacity of the teacher are not the only forces that influence attendance. Quite as important in that regard are the nature of the subject, its necessity as a basis for future work and the time and effort that the course demands. From the point

of view of the university, the teaching of the specialty with its limited number of students may be quite as necessary as the teaching of the general subject with its larger number.

Nor could the general academic standing of the teacher be safely taken as a basis for compensation. Of course this is a factor and an important one when an instructor is to be selected, and has much to do with the determination of his rank, but at best it is uncertain and intangible, so much so that alone it could never serve as an equitable standard for discrimination. It not infrequently rests upon no more substantial basis than the ability of the man to keep himself before the public, and yet this fact might not be apparent to those having the authority to discriminate. With such a standard, merit, proverbially modest, would surely suffer.

Equally unsatisfactory, as a basis for fixing salaries, would be the results of the teacher's work. Who can say what they are or what they mean to the university, except in a most general way? Who can place a money value upon them as related to the university? One man gives his life, so to speak, to his students; he labors solely for their benefit; his interests and his energies are centered in the art of instruction. Original investigations to such a man are important only as they contribute to his efficiency as a teacher. The immediate field of his influence is the classroom, but there is a broader field in the lives and work of those who profit by his efforts. Another devotes his predominant energies to research. Through his discoveries he is known to the world; he stands for something among scholars and investigators. But he lacks the teaching power, and with him the work of instruction is a disagreeable necessity. Each of these men has his place; each by the results of his work contributes to the strength and influence of the university, but who can say in what degree? Who is wise enough to determine from such a basis the respective money value of these men to the university?

As already suggested, the truth of the matter is that while the formal relation between the instructor and the university is one of contract, yet in reality, for practical purposes, it is very largely a different relation. As we have seen, it lacks the definite elements that form a basis for the fixing of compensation in the ordinary contract of service. It, moreover, implies duties in addition to those expressly stipulated that in themselves can never be measured by the money standard—duties that have to do with the shaping of the character and life of those with whom the instructor comes in contact, duties in regard to the policy and general interests of the university, duties connected with scholarship in the instructor's specialty, and with the advancement of the cause of sound learning generally. I need not say to those before me that while scholarship counts for much in a university man, that while academic results, pure and simple, count for much, other things are also essential. The composite that would represent the ideal university professor would undoubtedly combine with good scholarship and all that it signifies, the qualities that go to make up the distinct and commanding personality of the safe type. We would find in it not only scholarship, but manliness, good sense, ability to take a large and comprehensive view of things, wisdom, particularly as to utterances before the public, and those qualities

of heart that underlie and prompt self-sacrifice for the benefit of others. But such qualities, like scholarship and its results, are not of the definite and tangible nature that will admit of their use as a basis for determining the money value to his university of the man who possesses them. All things considered, we must conclude, I think, that the relation of the instructor to the university is essentially a public one and that the duties and responsibilities are essentially public. To measure the efficiency with which they are performed and to reach a result in each particular case, in any except the most general way, would obviously be impracticable. Who would be wise enough to fix differential rates of compensation upon so uncertain and indefinite a basis as the one described? What board of trustees or what college president would attempt it? If there be a more certain and definite basis I have failed to discover it. From the point of view of administration, then, it must be apparent, I think, that a general change to the merit system would be impracticable if not impossible.

Light may be thrown upon the question by reference to situations that are analogous. We will all agree, I think, that the college professor is essentially a public servant. His field is certainly a public one. If the system of compensation in other fields of public service is the same as in the academic field, it would seem to follow logically that there must be very good reasons for its existence. If radically wrong in principle and unjust and inequitable in results, attendant conditions being considered, it is not to be supposed that it would be generally used. Let us take, for example, the field of the judiciary. As a rule judges of the same rank receive the same compensation. The presiding judge of an appellate bench sometimes, to be sure, receives additional compensation, but it is because of additional duties; and occasionally for reasons that are purely local, having to do generally with the fact that one judge is necessarily put to greater expense than another, there may be a discrimination in the case of trial judges. But the general rule is that rank is the measure of compensation. It will be conceded, I am sure, that the difference in judicial ability and effectiveness is quite as great and quite as apparent as is the difference in academic ability and effectiveness. May we not properly conclude that if this difference is not a cause for discrimination in the one case, it should not be in the other? There is a general feeling, particularly in the profession, that our judges are underpaid and that more effective service would be secured if judicial salaries were commensurate with the dignity of the position and the labor involved, just as there is a general feeling, particularly among educators, that college professors are underpaid and that more adequate compensation would insure a greater degree of effectiveness; but I have yet to learn of any judge, or lawyer, or legislator who advocates a policy of discrimination in judicial salaries, as a remedy. Judicial service, like every other kind of public service, should not be rendered primarily for compensation. It should be free from the temptations that naturally arise when the element of money competition is involved. Such service is for the public good, and not for the special benefit of the individual citizen, excepting as he is a part of the public. Like the service of the teacher, it utterly lacks the characteristics that are essential for the fixing

of differential rates of compensation, and this because the service is general and public. The practical man realizes the situation, and he has never, so far as I have discovered, advocated a change of method. Furthermore, the attitude of the public mind in regard to the general principle involved is seen in the decided tendency of late to abolish the system of fees in certain lower grades of public service and substitute therefor the salary system.

Carrying the argument from analogy further, we may refer to the case of legislators, either state or national. Discrimination as to salaries in this field, as we all understand, is unknown, and I am very sure that it has never been advocated. The men who make up our public assemblies are of all grades of ability and usefulness. Some are leaders of the constructive type; others are incapable of independent thought and judgment. To serve the public in this capacity, is to some a pecuniary sacrifice, while to others it is a pecuniary advantage. All are paid alike, and the impracticability of an adjustment of compensation that would be equitable in each case is at once apparent. Indeed, if such an adjustment were practicable, its wisdom would be open to serious question. It undoubtedly may be said that the case is not strictly analogous, inasmuch as the service is incidental in the sense that it is not contemplated that it should be followed as a means of livelihood, but the same objection cannot be urged in the case of officers in the military or naval service where the pay is fixed by rank. If it be suggested that in the public service special merit is recognized by promotion, it may be said in reply that a similar recognition is to be found in academic service.

But returning to the situation immediately involved in this discussion, I beg to suggest that if there were no objection from the practical point of view to a general scheme of discrimination, there would still be, in my judgment, grave objections to it from the point of view of university policy.

The effectiveness of work in a university, it will be conceded at once, depends in no small degree upon the attitude of the members of the faculty toward one another and toward the governing authorities. If the university life is disturbed by feelings of jealousy and discontent, normal results cannot be expected. It is only when the faculty works as a unit that it develops its full strength. The wise administrator will keep out of the life of the university, to the extent of his ability, discordant elements. It is common knowledge that a general feeling that the governing authorities of the university are trying to do the fair thing, that they have no disposition to discriminate unjustly, makes for harmony; that such a feeling tends to secure unity of purpose, and to bring about concert of action in all that pertains to the life and interest of the university; that it fosters loyalty to the university. It is also common knowledge that a feeling that the authorities are making use of their power without due regard to the just rights of some and in the unwarranted advancement of others, tends to destroy the harmony and unity that the other feeling promotes. There may be no just or proper foundation for criticism, but the fact that there is criticism furnishes a basis for controversy and for the building up of factions.

It would seem to be a wise policy so to administer affairs as to reduce as far as possible the opportunities for criticism and discontent. It is needless for me to suggest, I think, that the introduction generally of a scheme of discrimination in salaries, would result in increasing such opportunities.

But if university trustees and university presidents were resourceful enough to devise schemes of discrimination that would be equitable, and were skilful enough to do so and preserve the peace, would the general adoption of the principle of discrimination be a wise exercise of authority? Some things it certainly would not accomplish. It would not, I am very sure, secure for university service any considerable number of strong men who would not be attracted under the present system. If a man has in view the making of money as his principal object, he would rarely if ever, even though his tastes were scholarly, select a university career, whatever might be the conditions as to salary. He would conclude at once, and he would be right, that no university under any salary system could offer pecuniary inducements at all comparable with those to be found in other fields. It would not improve, in my judgment, the general situation as to salaries. Every man is entitled to a reasonable compensation for his legitimate labor. Even though his calling be not followed primarily for gain, a man is the better worker when he feels that his efforts are receiving adequate pecuniary recognition. It is generally conceded that such recognition is not accorded the college professor. All will agree that his salary should be generous enough to enable him to live in a manner befitting his rank, to meet his obligations to family and to society without embarrassment, and to lay aside something for the future; and we all know that under present conditions this cannot usually be done. Any plan that promises to secure the needed change should, of course, receive our hearty support, providing it does not involve a sacrifice of professional standing or the adoption of a principle that would be out of harmony with the spirit that should prompt the labors of the teacher. I may be wrong, but I cannot bring myself to believe that the general adoption of the principle of discrimination would solve the problem to any appreciable extent. It would advance some salaries, but it would reduce others. It certainly would not give the universities the additional funds that they must have before any improvement in the situation can be expected. But by way of direct answer to the question, I beg to say that the general adoption of a scheme of discrimination if practicable, would not, in my judgment, be a wise exercise of authority, as it would encourage a wrong attitude in the teacher toward his work. There are ethical considerations that should not be disregarded. It ought not to be made possible for a university career to attract simply because of pecuniary opportunities. I cannot think that it would be a wise policy to put university service upon a competitive money basis, as it would tend to do away with the high motives of duty and devotion to the cause that should characterize the life and work of the teacher and scholar and to put in their places the ambition for gain that has so largely commercialized at least one of the learned professions.

DISCUSSION

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

PRESIDENT JORDAN further observed: I may add a word of my own to Professor Stillman's discussion of this topic.

The problem is rendered more complex through the existence of the assistant professor, on whom in great part the work of the American college now falls. Historically, the assistant professor is a recent development and his position has no analogue in the universities of England or Germany.

The fact that the American universities are teaching institutions, as distinguished from those whose primary function is that of an examining board, has had a large influence in shaping our university organization.

In England and Germany, in general, there is an established standard of excellence, of erudition or of culture to which the student aspires. In framing this standard, no consideration is paid to the powers or the tastes of the individual student. It is a standard set by society or by academic tradition, and only in late years has the number of such ideals or goals of effort been multiplied.

In Europe generally, the professor teaches what he pleases, but the student uses what he teaches only as an aid to a predetermined end. The teachers of minor grade find their opportunity when the professor fails to make his work useful as a preparation for examinations. If a *Privatdozent* can make his work attractive and practical, the students will pay for it. Otherwise he may starve. The university has no responsibility for him, no interest in his fate. Neither does the university feel any obligation that the subjects demanded in examination shall be well taught to each individual candidate.

This is especially true of the older universities of England, and to this day the chief university function which is unquestioned is that of examining for degrees. One and all, the English institutions are primarily examining and not teaching universities.

In an examining institution, fees are charged. These fees mostly go to the professor, and very unequally, but that is his own concern. If he is interested in them, he should choose a remunerative field. The professor needs only assistants of an inferior order. These he may pay himself, and their status does not concern the university. If professor and assistants fail to cover the ground, the private tutor covers the rest, and for him again the university has no responsibility.

In a teaching university, every student must be reached. The classes taught must fairly represent the subject, and the numbers in each class must not be greater than the teachers can properly handle.

In the small college under the old régime, this work was divided among a group of professors. The elective system demands many more teachers and better ones, so far as classroom work is concerned, than the English system. It is in fact the element of choice, whether between fixed courses, or between courses, which is responsible for the great extension of the American college system, which is now at its height.

Needing many more teachers, without the means of making them all professors, and with the opportunity of trying them out before promotion, has called into being the great army of assistant professors and others of intermediate grade, who do most of the actual work with students in the American colleges and universities today.

It is manifest that there can be no system of automatic promotion by which each of these may

ever be assured of a professorship in his own institution. There will never be professorships enough to go around, and even the best men must often look for promotion elsewhere. Besides this, only a small percentage of these men show that combination of personality, character, scholarship, productiveness, and force which should make them worthy of first-class professorships anywhere. In the promotion of these men, the interests of the university or college as a teaching body, in other words, the interests of the students, constitute almost the sole consideration.

It is a matter of wise administration to allow a reasonable minimum in each grade, enough to enable a man to live decently. It is well to make a small automatic addition to this from year to year. It is well that this addition should cease when further promotion is not in the university's own interest. It is almost as injurious to overpay a mediocre man as to give a good man too little. The only justification for either is found in the limitations of financial ability and in the absence of means for exact valuation of the achievements and the possibilities of the various instructors. The rapid promotion of exceptional men is, under our system, a necessity. Equal pay under equal conditions, considers the position, not the man, as the unit, and it is only possible under static conditions. Applied to the American university of today it would leave to the institution only the dregs of the faculty, unless its equal pay was held level with the maximum in other institutions. Except in two or three of our strongest universities, that course is at present impossible.

Because the university has assumed responsibility for all the necessary teaching, and this with the exaction of low fees, and in some parts of the country none at all, the assistant professor is part of the system as much as the professor. At the same time, the assistant professorship has risen through necessity, not through the voluntary choice of university authorities. We are not certain what he ought to be paid, how rapidly he should grow, or what should be his status in academic matters. These matters are mostly determined for us by necessity. We have not yet reached agreement as to whether he should have an equal voice or any voice in academic councils. University legislation usually tends to give him a nearly equal voice, regarding the academic executive as merely first among equals. University custom tends to hold the department executive responsible for his associates, after the fashion of business corporations. There is justice in both points of view, and it is well for the universities that the two tendencies should continue to strive with each other. But the final outcome will be that the president of the university will be the executive representative or spokesman, not the ruler of the faculty, and the department head will stand in similar relations to his fellows. Meanwhile the title is an academic honor, the salary a practical means to an end, and so long as our universities are in process of formation, the two will not bear any automatic or static relation to each other.

MR. WHEELER: There is one thing I am very clear about, that the practice which crept into universities sometime or other of offering men inducements to remain at their college as an offset to inducements offered at some other college ought to be entirely abolished. I trust that the days of that are at an end in this country. That, it seems to me, can be coupled with nothing but injury to the institution that pursues it. There is no evil we have gathered from the German university so patent to me as that. If a professor is called to another university, he ought to decide whether he will go or not go before his own university considers him for a moment. I have found that by taking a decided position on that matter and having it generally known in the university we have very considerably raised the standard of university loyalty and interest on the part of the professors, and once it is known that such things will not be done under any circumstances, the relations of the

professor to his university are warmer and more cordial. The notion of bargaining between universities seems to me to be a corrupting one. It is involved really in the question that is before us.

MR. MUNROE SMITH: In the Prussian universities it is now decided that the competitive system which has been considered so essential is practically to be abandoned. The system being introduced, with such exceptions as are necessary to protect the rights of the older professors, is that all the students' fees are to be swept into the treasury and all professors and instructors are to be put on salaries.

I am reminded of a very interesting analysis made by a German writer as to the real basis of all payment or return or reward which society makes for services. Von Jhering is one of the most interesting sociological writers of the nineteenth century, but many of the sociologists know nothing about him; he happened to be a lawyer, and they suppose his writings are legal treatises. He says society pays for services either in money or honor. The services which are distinctly of an economic character are paid in money, and the reward is what is supposed to be the value of the services and is determined by competition. On the other hand, society pays in honor for all the idealistic services which cannot be measured in money. Now if people could eat or drink honor and clothe themselves with it, the payment would be in honor alone, but there has to be even for such idealistic services a salary. Salary, however, does not purport to be based at all upon the value of the services, but simply on the necessities of existence, and salaries normally tend to represent the lowest amount on which a man can live in the social position in which he is living. He adds that there have been periods, particularly in the service of the state, in which public service has been paid in honor only, but at that time the state relied for the services it needed on the property holders, and that has been recognized as incompatible with democratic ideas. Von Jhering not only maintains that the system of salaries of state officers in Germany is explicable under his theory, but he asserts that the necessities of existence constitute the basis of payment for all purely public services, and particularly for all university services. He notes the fact that the salaries paid to government officers in Germany and to professors, among others, seem not to correspond to his law, in that they are generally below the necessary basis of existence in the social world to which the men belong. This deviation he explains by pointing out that honor is to a limited extent a thing that is capable of transfer, and anything that is capable of transfer can be paid for. While a man cannot sell his honor in the open market, he can communicate his honor to his wife, and consequently his honor is to a certain extent convertible into money. Consequently, the social system in Germany not only recognizes the fact, but is largely based on the fact, that a man who is a servant of the state, who holds an official position or professorial position, is entitled to have a certain dowry with his wife, and this has become so established a practice in Germany that it has become possible for the salary of state officers and of university professors, which ought to correspond to the actual necessary basis of existence, to fall below that basis.

This seems to be after all the philosophical basis of distinction between payment and salary, which seems to be more or less in all our minds, and if social relations were governed by simple formulae, this would be almost conclusive. As a matter of fact, however, the educational system of the country is not based on any single simple principle, and, to use von Jhering's phraseology, the remuneration of the American professor is a mixture of salary and pay.

MR. WEST: It is one thing to argue for or against a system of paying professors' salaries which

makes the rank and the salary match, and quite another thing to talk on either side of the case when the real question behind the actual situation is what I suppose is generally acknowledged, that taking the country bye and large professors' salaries, whether matching the rank given or not, are on a level that is lower than they ought to be. If it were the case in this country that in more than a very few institutions the ordinary salary paid to a full professor of high standing was what we perhaps all should agree ought to be paid, then we would have a very much simpler matter to deal with, but until this dreadful bread-and-butter need is somewhat met, the struggle for greater salaries seems inevitable. I never can quite bring myself to advise a young man of good ability, who has no prospect for any means except what he may earn by his salary, to go into the scholar's life at the present time, and it is rather an appalling situation that that should be so. Yet if it is so, is it best that a young man of high power and purposes should go into the scholar's life with the probability of not being able to earn enough to enable him to marry and bring up a family in sufficient social self-respect to justify in the eyes of the community the choice he has made in taking up the scholar's life? I feel very deeply that the best brains of the United States is going into the professions and into business, for many reasons—perhaps our American temperament, perhaps dazzling material rewards of our unprecedented prosperity. I think this is in line with what President Eliot said yesterday as to why there is a better body of brains today in the law school or in the medical school than in the graduate schools of arts and sciences.

I believe firmly in a minimum salary attached to any rank and in a system of discrimination. I cannot see why the man who is to have salary and honor should not have them in proportion. If there were more honor, many men would be willing to live on less salary, but the two together ought to bulk pretty fairly even. I once heard one of the faculty of Trinity College, Dublin, say "It isn't the big salaries that would tempt us to America. It is the kind of life and the kind of honor we get, the kind of students we can get." Now that seems to me the whole measure of dignity and opportunity of the professor's life. If we can get that, we can get men to come for \$5,000 to one place who wouldn't go for \$10,000 to another. Give a good minimum salary and give on top of that such social honor and such intellectual honor and such respect as the high calling of the profession deserves. Then all that is needed is a good, solid, genuine salary that amounts to something, with occasional variation for the best men and the possession of the kind of life, the kind of intellectual ideals, the kind of opportunity that appeals to such men.

MR. HALL: Des Moulins in his *Anglo-Saxon Superiority* ascribes the unprogressive condition of education in France to the fact that the ideal set before the academic youth in France is to get a position, to wear a uniform, to obtain a title. Their life can be written after they get their appointment with nothing else to be filled in except the date of their death.

This summer I was told by a professor in Paris that that was the great danger everywhere. He said the best thing that ever happened was when twenty years ago an Ecole Pratique des Hautes Etudes was established which essentially meant singling out those professors in Paris who were really the best men, and sometimes giving them a release from part of the drudgery of their profession and sometimes more pay as members of the new école. He spoke with great enthusiasm of it and thought it marked an epoch.

Within the last few years, since the attempt of certain teachers in Chicago to unionize the teaching profession and to force higher wages upon the city, there has been in a number of places in the country an effort to differentiate wages in the employment of teachers in the grades below

the high school. In some places where that has been done, in the opinion of those who have observed it, it works admirably well. In our own little faculty of only sixteen men, I find we have but two men who are paid the same salary, and we have done, perhaps erroneously, precisely what Mr. Wheeler deems unwise. When a man has had a call elsewhere we have raised his salary to keep him. We think it works well. We feel it an honor to have a man called to a position in a distinguished college.

We do attempt to measure intellectual qualities. It is a psychological theory which has been advocated very strongly that they cannot be measured, but we all try to do it. We give prizes and grade men, and, in doctor's degrees, we frequently recognize differences of quality. Now why logically the moment a man is put on our staff should we stop recognizing the differences of scholarship? It is a hard thing to do, but it seems to me that the danger is that if we have uniform salaries we shall have the trouble we find in officialism where things are paid in the same way. We haven't found in our little circle any of this discontent. I think our men recognize the reasons for the inequalities. They have different opportunities for work and earning money outside, due to these very qualities. It seems to me that if it should come to prevail that every man should have the same pay for the same kind of work we should have no protection from an academic strike on a grand scale.

MR. HASKINS: To go back to what Mr. West has said—until salaries get up to a certain level it is more or less academic to consider what the ultimate system should be. The method of competition between institutions and the method of discriminations between individuals are one of the very best means for raising salaries. The pressure that puts salaries up in an institution comes very frequently from the raising of the salary of one or two men to keep them; that is used as a precedent for raising the salaries of others very soon, and the whole level rises as a result. It seems to me very desirable that some discrimination should go on in order to help us up to the level where we can consider this question somewhat more ideally.

MR. VAN HISE: In the state universities of the Middle West, salaries are too low. We are doing our best to advance salaries, but if we simply decide that we shall raise the salaries from \$3,000 to \$4,000 we may not find active support among our trustees nor sufficient funds from the state. But if A and B and C who are on the faculty and are recognized to be important forces in the education of the state, are asked to go somewhere else at higher salaries, public sentiment will agree to that increase, and it will follow that D, E, and F will have increases in salaries as soon as possible. And so I should not at all agree with President Wheeler in the matter of practice, although I believe that the principle which he enunciates would be a good one if we can once get the salaries where they ought to be. Recently before a legislative committee, I mentioned the fact that circuit judges receive salaries of \$5,000, and that the professors in the universities are men of at least equal ability. "Oh," they said, "but we can't get circuit judges of proper grade to accept these positions for less than \$5,000." Just as soon as competition demands that we go to \$5,000 in the universities, we will get there.

MR. COMSTOCK: It seems to me that one of the most marked shortcomings in the professorial career of the present time is the absence of the great and distinguished reward that may be obtained by the few exceptional men. When a bill was pending in Parliament to appropriate a certain amount of the large income of the bishops to the relief of the condition of the inferior clergy, Sydney Smith said that as a clergyman it was worth a great deal more to him to have the prospect

of being a bishop than to receive the shilling or guinea which would result in a leveling down. I feel it is the same about professors. They would look with great complacency upon an increase in salaries, provided there is a prospect that ability and industry may attain to some of these conspicuous rewards rather than a condition in which the average is somewhat higher but the tops all cut off. It is a constant impulse to additional service, to additional effort, on the part of a man to attain the higher rewards of his profession, and I cannot conceive of anything more detrimental than the fixing of an absolute limit beyond which material return for attainments ends. I should distinctly deprecate any scheme of fixed salaries which contemplates a regular succession of grades through which a man goes by virtue of long service only.

MR. PAGE: Universities have not only to compete with each other, but with outside employment, particularly law, medicine, and engineering. In order to get competent men in these professional schools it is absolutely necessary that they shall be paid high salaries. To get a competent man in surgery for example, particularly if the university is in a small town where the man cannot do much general practice, it is necessary to pay him a very high salary. Now it is out of the question to pay such a salary to all the men in the university faculty. A professor of Greek or history is not bid for by the public, and he has no outside remuneration. If we were to undertake to fix a level of salaries for a small group of professors we should have to have one level for so-called academic professors, and a level for engineering, law, and medicine, and that I think would make the jealousies and the discontents within the faculty much greater than those complained of at the present time.

MR. ELIOT: That is just what I observe with regard to salaries in Harvard University. The salary paid by the university is often quite a moderate part of the real earnings of the man; and that is in my opinion a desirable tendency. That is going to retain in the profession of university teaching men of large ambition and large brains. We see that at Harvard, not only in law and medicine and engineering, but in architecture and, strikingly of late, in literature, and in what may be called the productive mercantile occupations which can be associated with a professor's work.

Men are retained in the service or attracted hither by a large number of considerations that haven't much to do with salaries. One can live in Cambridge in a house which has sunlight all round it, and is only three stories high; and he can have a garden. And one may live in a manner which yields a great deal of desirable companionship for the man and his wife. That is a matter of social conditions; but it is also a result of the size of the university group, so to speak. These are practical considerations.

And then I think university service is going in the future to be regarded favorably by young men who do not ask first, How much money can I earn in this occupation? but who ask first, How much service can I render to the community in this calling? I see many young fellows who ask the latter question first. And one can tell them with a good deal of assurance that a professorial position offers not only the form of service which we usually associate with the occupation of a teacher, but many other forms of serving beside; and that I believe renders the salary question less important than it would otherwise be. Of course, it is important that the salaries should afford a modest livelihood to a family, and that they should afford it early enough. We were given an opportunity by the alumni to raise salaries here a year and a half ago, and the place we raised salaries most was in the first term of appointment as assistant professor—just at that stage of life where

our salaries had been uncomfortably low. We put the salary which used to be \$2,000 a year for five years up to \$2,500 a year.

The situation as a whole seems to be hopeful today. I think the general opportunities for usefulness and the rewards in consideration and influence for an American professor are higher now than they have ever been before in my time, and it looks as if they were going to be higher and higher.

APPENDIX I

In the following states, appropriations either state or city were made during the year 1903-4 for the maintenance of institutions for higher education, including both current expenses and appropriations for buildings or other special purposes—

| | | | |
|----------------------|-----------|------------------------|-----------|
| California | \$567,746 | Missouri | \$330,547 |
| Colorado | 140,000 | Nebraska | 282,250 |
| Georgia | 136,900 | New York | 308,203 |
| Illinois | 630,200 | Ohio | 575,781 |
| Indiana | 180,000 | Pennsylvania | 344,540 |
| Iowa | 285,500 | Texas | 165,000 |
| Kansas | 220,000 | Wisconsin | 471,500 |
| Michigan | 448,525 | | |

These figures are taken from the report of the commissioner of education for 1904, and do not include appropriations for schools of technology.

APPENDIX II

EXTRACT FROM A LETTER WRITTEN BY PRESIDENT ELIOT DECEMBER 12, 1874, TO THE COMMISSIONERS OF THE COMMONWEALTH APPOINTED "TO INQUIRE INTO THE EXPEDIENCY OF REVISING AND AMENDING THE LAWS OF THE STATE RELATING TO TAXATION AND THE EXEMPTIONS THEREFROM." (*House Doc. No. 15, 1875*, p. 369.)

The property which has been set apart for religious, educational, and charitable uses is not to be thought of or dealt with as if it were private property; for it is completely unavailable for all the ordinary purposes of property, so long as the trusts endure. It is like property of a city or state which is essential for carrying on the work of the city or state, and so cannot be reckoned among the public assets; it is irrecoverable and completely unproductive. The capital is sunk, so to speak, just as the cost of a sewer or a highway is capital sunk. There is a return, both from a church or a college, and from a sewer or a highway, in the benefit secured to the community; but the money which built them is no longer to be counted as property, in the common sense. It can never again be productive, except for the purposes of the trust for which it was set apart.

When a new road is made where there was none, the state, or some individual, sacrifices the value of the land it covers, and the money spent in building the road. It also sacrifices the oppor-

tunity to tax, in the future, the improvements which might have been put upon that land if it had not been converted into a road, and all the indirect taxable benefits which might have been derived from the use for productive purposes of the land, and of the money which the road cost. When a church, or a college, or a hospital, buys land, and erects buildings thereon, the state does not sacrifice the value of the land, or the money spent upon the buildings; private persons make these sacrifices; but the state does sacrifice, by the exemption statute, the opportunity to tax, in the future, the improvements which might have been put upon that land if it had not been converted to religious, educational or charitable uses, and all the indirect taxable benefits which might have been derived from the use for productive purposes of the land, and of the money which the buildings cost.

This is the precise burden of the exemption upon the state. Why does the state assume it? For a reason similar to, though much stronger than, its reason for building a new road, and losing that area forever for taxation. The state believes that the new road will be such a convenience to the community, that the indirect gain from making it will be greater than the direct and indirect loss. In the same way the state believes, or at least believed when the exemption statute was adopted, that the indirect gain to its treasury which results from the establishment of the exempted institutions is greater than the loss which the exemption involves. If this belief is correct in the main, though not perhaps universally and always, the exemption can hardly be properly described as a burden to the state at large.

The parallel between a sewer or a highway, on the one hand, and land and buildings of exempted institutions, on the other, may be carried a little farther with advantage. The abutters often pay a part of the cost of the sewer or the highway which passes their doors, because it is of more use to them than to the rest of the inhabitants, and the members of the religious, educational or charitable society erect their necessary buildings and pay for their land themselves. If it be granted that the religious, educational or charitable use is a public use, like the use of a sewer or a highway, there is no more reason for taxing the church, the academy or the hospital, than for annually taxing the abutters on a sewer or a highway on the cost of that sewer or on the cost of the highway and its value considered as so many feet of land, worth, like the adjoining lots, so many dollars a foot. The community is repaid for the loss of the taxable capital sunk in the sewer by the benefit to the public health, and the resulting enhancement of the value of all its territory. In like manner, it is repaid for the loss of the capital set apart for religious, educational, and charitable uses, by the increase of morality, spirituality, intelligence, and virtue, and the general well-being which results therefrom. To tax lands, buildings, or funds which have been devoted to religious or educational purposes, would be to divert money from the highest public use—the promotion of learning and virtue—to some lower public use, like the maintenance of roads, prisons or courts, an operation which cannot be expedient until too large an amount of property has been devoted to the superior use. This is certainly not the case in Massachusetts today. The simple reasons for the exemption of churches, colleges and hospitals from taxation are these: first, that the state needs those institutions; and secondly, that experience has shown that by far the cheapest and best way in which the state can get them is to encourage benevolent and public-spirited people to provide them by promising not to divert to inferior public uses any part of the income of the money which these benefactors devote to this noblest public use. The statute which provides for the exemption is that promise.

APPENDIX III

COLLEGE TOWNS HAVE NO HIGHER TAX-RATES THAN NON-COLLEGE TOWNS

| | ¹⁹⁰⁵ Population ^a | ¹⁹⁰⁵ Assessable Property ^b | ^{1905 and 1906} Tax Rate ^c | ^{1905, January 1} Exempted Property ^d |
|--------------------|--|---|---|--|
| Cambridge..... | 97,434 | \$103,845,600 | \$19.00 \$18.60 | \$25,377,063 |
| Fall River..... | 105,762 | 81,754,247 | 18.80 18.40 | 2,704,000 |
| Worcester..... | 128,135 | 120,865,502 | 17.00 16.60 | 5,922,900 |
| Lowell..... | 94,889 | 71,632,643 | 20.20 19.60 | 3,119,751 |
| Lawrence..... | 70,050 | 46,235,468 | 16.80 16.00 | 1,549,025 |
| Springfield..... | 73,540 | 80,904,477 | 15.40 15.00 | 3,619,193 |
| Lynn..... | 77,042 | 56,157,073 | 18.40 17.00 | 1,515,100 |
| New Bedford..... | 74,362 | 64,349,661 | 19.40 18.40 | 2,436,860 |
| Amherst..... | 5,313 | 3,599,900 | 16.25 16.25 | 2,909,099 |
| Ware..... | 8,594 | 4,398,210 | 19.70 18.00 | 214,074 |
| Easthampton..... | 6,808 | 3,781,772 | 17.00 17.00 | 583,735 |
| South Hadley..... | 5,054 | 2,529,372 | 21.00 16.50 | 1,553,850 |
| Northampton..... | 19,957 | 12,739,859 | 17.00 16.50 | 4,416,607 |
| North Adams..... | 22,150 | 14,862,527 | 22.00 20.00 | 847,000 |
| Pittsfield..... | 25,001 | 18,330,223 | 18.50 18.50 | 1,446,754 |
| Medford..... | 19,686 | 21,240,150 | 21.40 20.20 | 1,119,700 |
| Andover..... | 6,632 | 5,902,668 | 16.00 17.50 | 1,873,061 |
| North Andover..... | 4,614 | 4,462,302 | 17.50 18.00 | 64,200 |
| Methuen..... | 8,676 | 5,178,157 | 19.30 19.00 | 118,050 |
| Amesbury..... | 8,840 | 5,346,227 | 17.70 18.80 | 382,692 |
| Saugus..... | 6,253 | 4,555,686 | 18.70 19.80 | 77,358 |
| Danvers..... | 9,063 | 5,341,280 | 18.00 19.20 | 234,608 |
| Rockport..... | 4,447 | 3,051,252 | 21.00 18.00 | 67,000 |
| Williamstown..... | 4,425 | 3,035,747 | 18.80 18.70 | 2,120,203 |
| Lee..... | 3,972 | 1,918,865 | 18.32 18.05 | 59,725 |
| Dalton..... | 3,122 | 3,017,700 | 14.70 15.70 | 93,650 |
| Provincetown..... | 4,362 | 1,928,920 | 20.00 19.50 | 50,000 |
| Monson..... | 4,344 | 1,668,168 | 16.20 17.00 | 245,613 |
| Belmont..... | 4,360 | 5,602,650 | 19.90 18.00 | 1,664,629 |
| Lexington..... | 4,530 | 5,957,670 | 20.40 19.00 | 131,950 |
| Needham..... | 4,284 | 4,503,731 | 18.00 18.50 | 76,455 |
| Warren..... | 4,300 | 1,762,743 | 21.50 19.00 | 105,300 |

^a Massachusetts Census of 1905.

^b Massachusetts Public Document No. 19 of 1905; official returns on file with the secretary of the commonwealth.

^c Report of Massachusetts Tax Commissioner, for the year ending December 31, 1904.

APPENDIX IV

IN COLLEGE TOWNS THE PERCENTAGE OF THEIR TAXABLE PROPERTY TO THAT OF THE WHOLE COUNTY IS HIGHER THAN THE PERCENTAGE OF THEIR TAXABLE INDIVIDUALS TO THE NUMBER OF TAXABLE INDIVIDUALS RESIDING IN THE COUNTY:¹

| City or Town | County | Tax Rate per \$1000 | Average Tax Rate of County per \$1000 of Assesable Property | Average Tax Rate of County outside City or Town in Tabulation per \$1000 of Assesable Property | Percentage of Taxable Individuals Residing in County | Percentage of Population of the County | Percentage of Taxable Property in County |
|--------------|----------------|---------------------|---|--|--|--|--|
| Amherst | Hampshire.... | \$16.25 | \$17.04 | \$17.21 | 8.84% | 8.54% | 10.01% |
| Northampton | Hampshire.... | 17.00 | 17.04 | 17.21 | 30.53 | 32.07 | 35.46 |
| Williamstown | Berkshire..... | 18.80 | 18.03 | 18.00 | 4.17 | 4.50 | 4.44 |
| Cambridge | Middlesex..... | 19.00 | 18.34 | 18.19 | 15.17 | 16.01 | 18.21 |
| Andover | Essex..... | 16.00 | 16.80 | 16.81 | 1.57 | 1.74 | 1.92 |

¹ Compiled from *Public Document No. 19* of 1905.

APPENDIX V

TAXED AND UNTAXED LODGINGS FOR STUDENTS OF THE CAMBRIDGE DEPARTMENTS OF HARVARD UNIVERSITY IN 1866-7 AND IN 1906-7¹
(RADCLIFFE COLLEGE NOT INCLUDED)

| | In College Halls (untaxed) | | In Private Halls (taxed) | | In Private Houses (taxed) | | Not Lodging in Cambridge | | Totals | |
|---|----------------------------|---------|--------------------------|---------|---------------------------|---------|--------------------------|---------|---------|---------|
| | '66-'67 | '06-'07 | '66-'67 | '06-'07 | '66-'67 | '06-'07 | '66-'67 | '06-'07 | '66-'67 | '06-'07 |
| Undergraduate departments— Harvard College and the Lawrence Scientific School..... | 309 | 707 | 13 | 883 | 145 | 537 | 13 | 325 | 480 | 2452 |
| Graduate departments— Graduate School of Arts and Sciences and Graduate School of Applied Science..... | 1 | 110 | 1 | 29 | 6 | 192 | .. | 85 | 8 | 416 |
| Divinity School | 12 | 16 | .. | 2 | 1 | 16 | 2 | 5 | 15 | 39 |
| Law School..... | 8 | 123 | 1 | 162 | 129 | 338 | 19 | 69 | 157 | 692 |
| Totals..... | 330 | 956 | 15 | 1076 | 281 | 1083 | 34 | 484 | 660 | 3599 |

¹ From the annual *Catalogues* of Harvard University.

This table shows that there are now 2,159 students in taxed lodgings in Cambridge against 296 in 1866-67, or more than seven times as many as in 1866-67.

Of the 3,599 students now in the Cambridge departments as above about 2,000 get their meals in Memorial Hall and Randall Hall, including many who do not lodge in Cambridge. Making allowance for those who take no meals in Cambridge, there remain about 1,300 students who get

most of their meals in restaurants and houses taxed in Cambridge, or twice as many as boarded in Cambridge in 1866-67. The laundry work of nearly 3,000 students is also done now in taxed houses and shops in Cambridge, whereas in 1866-67 there were only 626 students to offer that kind of employment to Cambridge residents.

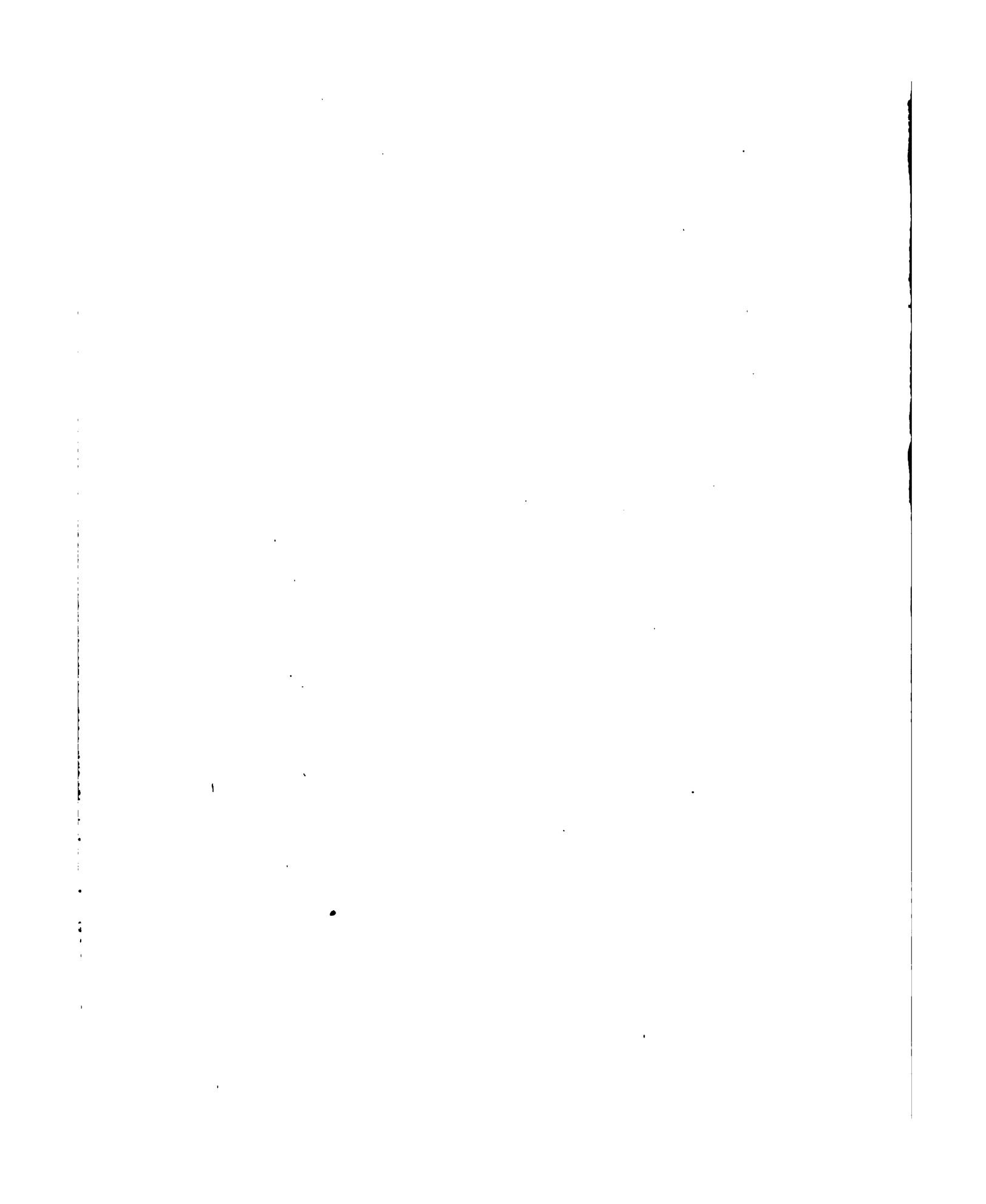
The obvious inference from the above figures is this—to increase the benefits which an educational institution confers on the town in which it is situated, the best way is to make the institution itself better and stronger, so that it may always be getting more and more teachers, students, and employees.

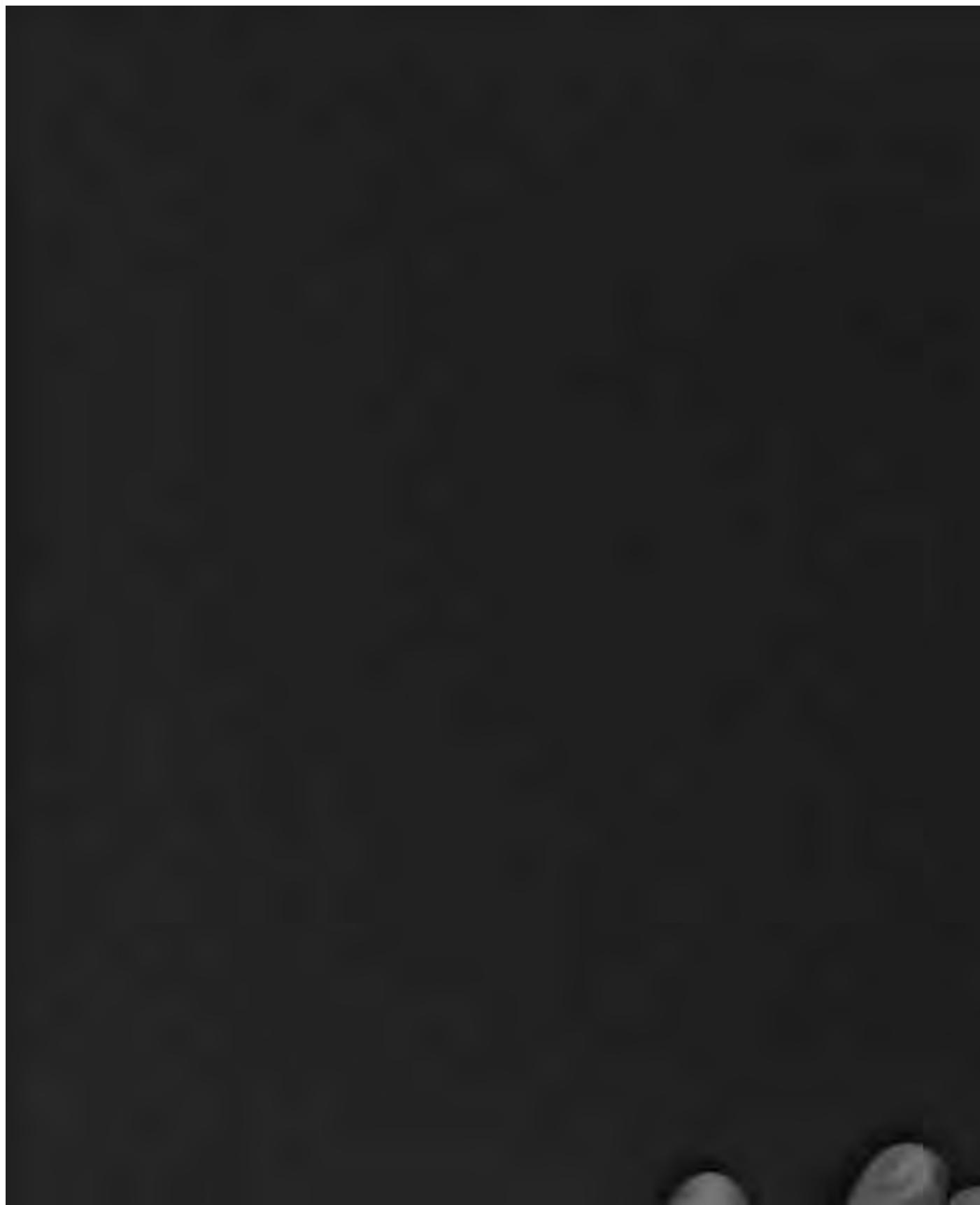
APPENDIX VI

EXEMPTION DOES NOT DIMINISH THE VALUE OF TAXABLE REALTY IN COLLEGE TOWNS
AS COMPARED WITH OTHER TOWNS

(THE FIGURES ARE FOR 1905)

| Town | Population | Value of Taxable Real Estate | Per Capita Value of Taxable Real Estate | Tax Rate |
|-----------------------|------------|------------------------------|---|----------|
| Cambridge..... | 97,434 | \$87,851,500 | \$901.60 | \$19.00 |
| Fall River..... | 105,762 | 50,219,900 | 474.80 | 18.80 |
| Worcester..... | 128,135 | 95,669,850 | 745.80 | 17.00 |
| Lowell..... | 94,889 | 57,208,845 | 603.90 | 20.20 |
| Lawrence..... | 70,050 | 36,224,000 | 517.10 | 16.80 |
| Springfield..... | 73,540 | 63,273,330 | 860.30 | 15.40 |
| Lynn..... | 77,042 | 46,130,000 | 596.00 | 18.40 |
| New Bedford..... | 74,362 | 40,293,975 | 541.80 | 19.40 |
| Somerville..... | 69,272 | 53,392,000 | 770.70 | 18.30 |
| Amherst..... | 5,313 | 2,726,060 | 513.20 | 16.25 |
| Ware..... | 8,594 | 3,338,805 | 388.50 | 19.70 |
| Easthampton..... | 6,808 | 2,834,380 | 416.30 | 17.00 |
| South Hadley..... | 5,054 | 2,144,710 | 424.30 | 21.00 |
| Northampton..... | 19,957 | 10,231,750 | 512.60 | 17.00 |
| North Adams..... | 22,150 | 12,065,012 | 562.70 | 22.00 |
| Pittsfield..... | 25,001 | 13,813,825 | 552.50 | 18.50 |
| Medford..... | 19,686 | 18,393,550 | 935.30 | 21.40 |
| Cambridge..... | 97,434 | 87,851,500 | 901.60 | 19.00 |
| Somerville..... | 69,272 | 53,392,000 | 770.70 | 18.30 |
| Malden..... | 38,037 | 25,128,200 | 660.60 | 17.20 |
| Everett..... | 29,111 | 19,951,150 | 685.30 | 17.80 |
| Chelsea..... | 37,289 | 22,497,950 | 603.30 | 19.00 |
| Medford..... | 19,686 | 18,393,550 | 934.30 | 21.40 |
| Revere..... | 12,659 | 11,888,600 | 939.10 | 22.00 |
| Williamstown..... | 4,425 | 2,680,575 | 606.00 | 18.80 |
| Adams..... | 12,486 | 3,557,875 | 285.00 | 18.00 |
| North Adams..... | 22,150 | 12,065,012 | 544.60 | 22.00 |
| Dalton..... | 3,122 | 1,621,581 | 519.50 | 14.70 |
| Great Barrington..... | 6,152 | 3,767,890 | 612.40 | 13.50 |
| Lee..... | 3,972 | 1,424,438 | 358.69 | 18.32 |







The ASSOCIATION
OF AMERICAN
UNIVERSITIES

*The Ninth
Annual Conference*



BELKNAP
ANN ARBOR, MICHIGAN
January Ninth and Tenth, 1908



*THE ASSOCIATION
OF
AMERICAN UNIVERSITIES*

1907—1908

The Association of American Universities

JOURNAL
OF
PROCEEDINGS AND ADDRESSES
OF THE
NINTH ANNUAL CONFERENCE

HELD IN
ANN ARBOR, MICHIGAN
JANUARY 9 AND 10
1908

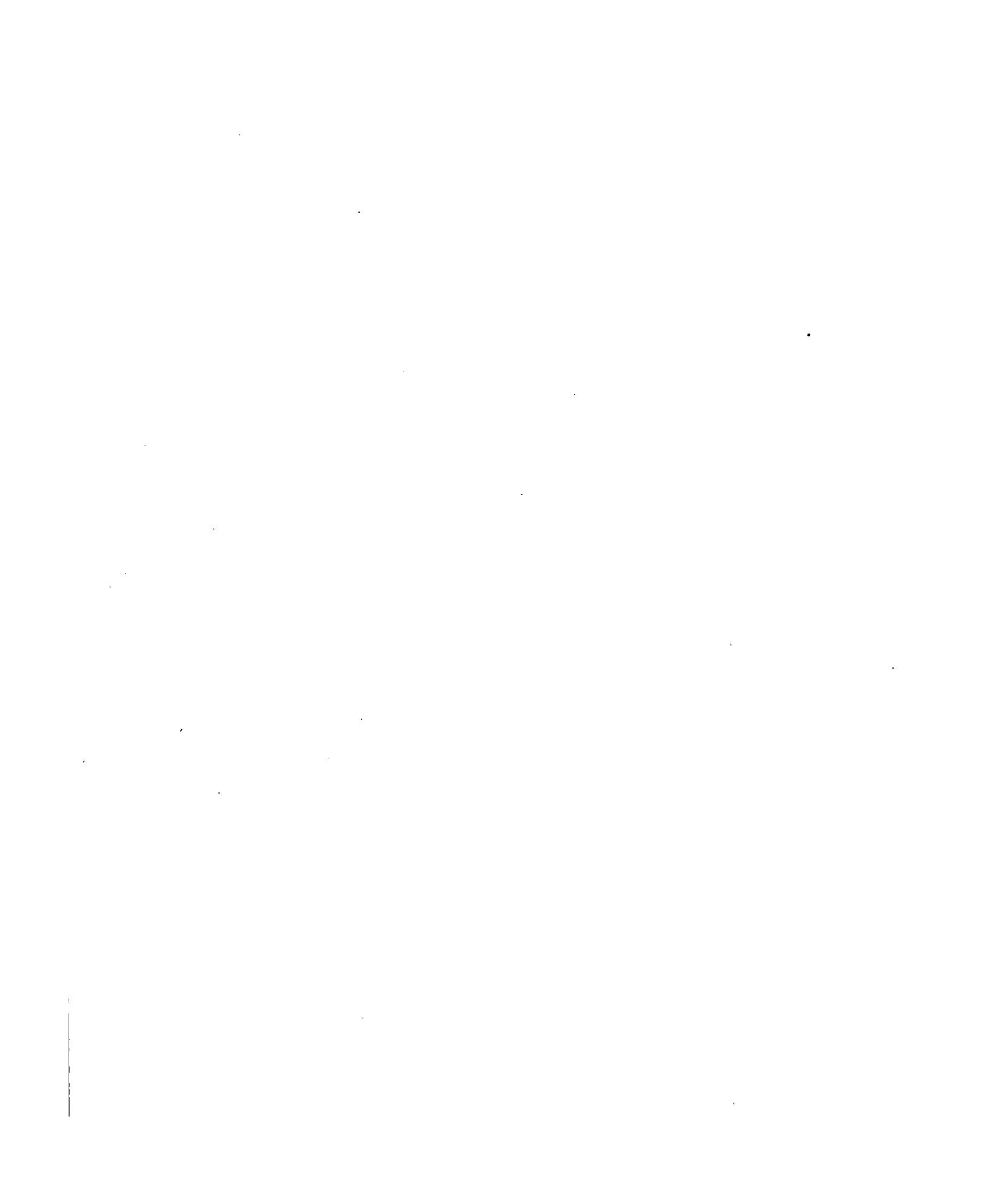
1908
PUBLISHED BY THE ASSOCIATION

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CONTENTS

| | PAGE |
|---|-----------|
| MEMBERSHIP | 7 |
| CALENDAR OF CONFERENCES | 8 |
| OFFICERS | 8 |
| PROCEEDINGS OF THE NINTH ANNUAL CONFERENCE | 9 |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 9 |
| FIRST SESSION—MINUTES | 10 |
| SECOND SESSION—MINUTES | 11 |
| THIRD SESSION—MINUTES | 11 |
| FOURTH SESSION—MINUTES | 12 |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 14 |
| PAPERS AND DISCUSSIONS AT THE NINTH ANNUAL CONFERENCE: | |
| THE SECOND SESSION: | |
| PAPERS on “<i>The Possibilities of Intellectual Coöperation between the United States and Latin America,</i>” by Mr. Rowe | 15 |
| DISCUSSION by Mr. Brewster, p. 22; Mr. Stringham, p. 23; Mr. Reinsch, p. 23; Mr. Rogers, p. 23; Mr. Rowe, p. 23; Mr. Remsen, p. 24; Mr. Cross, p. 24; Mr. Laughlin, p. 24; Mr. Rowe, p. 25; Mr. Stringham, p. 25; Mr. Remsen, p. 26; Mr. Rowe, p. 26. | |
| THE THIRD SESSION: | |
| PAPERS on “<i>The Part of the Undergraduate College in Preparation for Professional Education,</i>” by Mr. Vaughan | 26 |
| DISCUSSION by Mr. Vaughan, p. 32; Mr. Schurman, p. 33; Mr. Moore, p. 34; Mr. Schurman, p. 34; Mr. Moore, p. 34; Mr. Schurman, p. 34; Mr. Moore, p. 34; Mr. Page, p. 34; Mr. Vaughan, p. 34; Mr. Rogers, p. 34; Mr. Schurman, p. 36; Mr. Rogers, p. 36; Mr. Ormond, p. 36; Mr. Schurman, p. 37; Mr. Rogers, p. 37; Mr. Schurman, p. 37; Mr. Munroe Smith, p. 37; Mr. Stringham, p. 38; Mr. Laughlin, p. 39; Mr. Stringham, p. 39; Mr. Rogers, p. 39; Mr. Williams, p. 40; Mr. Vaughan, p. 40. | |
| THE FOURTH SESSION: | |
| PAPERS on “<i>The Doctor’s Dissertation: Selection of Subject, Preparation, Acceptance, Publication,</i>” by Mr. Small | 41 |
| DISCUSSION by Mr. D’Ooge, p. 70; Mr. Carpenter, p. 71; Mr. Cross, p. 71; Mr. Page, p. 72; Mr. Judson, p. 72; Mr. Small, p. 72; Mr. Garfield, p. 72; Mr. Schurman, p. 73; Mr. Pritchett, p. 73. | |
| APPENDICES | 74 |



MEMBERSHIP
OF
THE ASSOCIATION OF AMERICAN UNIVERSITIES

| | |
|------------------------------------|----------------------------|
| UNIVERSITY OF CALIFORNIA, | Berkeley, California |
| CATHOLIC UNIVERSITY OF AMERICA, | Washington, D. C. |
| THE UNIVERSITY OF CHICAGO, | Chicago, Illinois |
| CLARK UNIVERSITY, | Worcester, Massachusetts |
| COLUMBIA UNIVERSITY, | New York, N. Y. |
| CORNELL UNIVERSITY, | Ithaca, N. Y. |
| HARVARD UNIVERSITY, | Cambridge, Massachusetts |
| THE JOHNS HOPKINS UNIVERSITY, | Baltimore, Maryland |
| UNIVERSITY OF ILLINOIS, | Urbana, Illinois |
| LELAND STANFORD JUNIOR UNIVERSITY, | Palo Alto, California |
| UNIVERSITY OF MICHIGAN, | Ann Arbor, Michigan |
| UNIVERSITY OF MINNESOTA, | Minneapolis, Minnesota |
| UNIVERSITY OF MISSOURI, | Columbia, Missouri |
| UNIVERSITY OF PENNSYLVANIA, | Philadelphia, Pennsylvania |
| PRINCETON UNIVERSITY, | Princeton, New Jersey |
| UNIVERSITY OF VIRGINIA, | Charlottesville, Virginia |
| UNIVERSITY OF WISCONSIN, | Madison, Wisconsin |
| YALE UNIVERSITY | New Haven, Connecticut |

CALENDAR OF CONFERENCES

FIRST ANNUAL CONFERENCE (organization),
Chicago, February 27, 28, 1900

SECOND ANNUAL CONFERENCE,
Chicago, February 26-28, 1901

THIRD ANNUAL CONFERENCE,
Chicago, February 25-27, 1902

FOURTH ANNUAL CONFERENCE,
New York, December 29-31, 1902

FIFTH ANNUAL CONFERENCE,
New Haven, February 18-20, 1904

SIXTH ANNUAL CONFERENCE,
Baltimore, January 12-14, 1905

SEVENTH ANNUAL CONFERENCE,
San Francisco, Berkeley, and Palo Alto,
March 14-17, 1906

EIGHTH ANNUAL CONFERENCE,
Cambridge, November 23, 24, 1906

NINTH ANNUAL CONFERENCE,
Ann Arbor, January 9, 10, 1908

OFFICERS

1908-1909

President—The representative of the University of Michigan.

Vice-President—The representative of Leland Stanford Junior University.

Secretary—The representative of Harvard University (to serve for a period of five years).

Additional members of the *Executive Committee*—The representative of Cornell University;
the representative of Columbia University.

THE NINTH ANNUAL CONFERENCE

FIRST DAY'S PROCEEDINGS

THURSDAY, JANUARY 9, 1908

MINUTES

MEETING OF THE EXECUTIVE COMMITTEE

A meeting of the Executive Committee was held on Thursday, January 9, 1908, at 9 A. M., in the Engineering Library, University of Michigan.

There were present the following members of the Executive Committee:

For Cornell University, *President*—Mr. Schurman

For Catholic University of America, *Vice-President*—Mr. Pace

For Columbia University, *Secretary*—Mr. Carpenter

The Secretary presented the **FINANCIAL REPORT** which, upon motion, was approved.

RECEIPTS:

| | |
|--------------------------------------|-----------------|
| From assessments 1907-1908 | \$ 374.60 |
| Balance on hand | 254.32 |
| | <u>\$628.92</u> |

EXPENDITURES:

| | |
|---|-----------------|
| For printing programs, Eighth Conference | \$ 7.30 |
| For reporting Eighth Conference | 75.00 |
| For printing proceedings, Eighth Conference | 488.15 |
| For multigraph work | 2.30 |
| For postage, express, and telegrams | 14.57 |
| For printing programs, Ninth Conference | 10.75 |
| | <u>\$598.07</u> |
| Balance on hand January 8, 1908 | <u>\$598.07</u> |
| | \$30.85 |

Upon motion, it was

Resolved, That, in the opinion of the Executive Committee, the annual *Journal of Proceedings and Addresses* should be printed in an edition of 1,000, instead of 800 copies as heretofore.

Resolved, That, in view of increasing the edition of the annual *Journal*, the annual assessment of members of the Association should be increased to Forty Dollars (\$40), instead of Twenty-five (\$25) as heretofore.

The report of the special committee of the Executive Committee, appointed April 18, 1907, to prepare a provisional list of such Latin-American institutions and authorities as should participate in a proposed conference with the Association of American universities, was presented by the chairman of the special committee.

Upon motion, it was

Resolved, That the report of the special committee be accepted and approved.

The Committee adjourned at 10 A. M.

The Association of American Universities

FIRST SESSION

The First Session was called to order in the Engineering Library, at 10 A. M., with Mr. Schurman, of Cornell University, in the chair.

The following representatives were present:

UNIVERSITY OF CALIFORNIA—Mr. Irving Stringham

CATHOLIC UNIVERSITY OF AMERICA—Mr. Edward A. Pace

THE UNIVERSITY OF CHICAGO—Mr. J. Laurence Laughlin

COLUMBIA UNIVERSITY—Mr. W. H. Carpenter, Mr. Munroe Smith

CORNELL UNIVERSITY—Mr. J. G. Schurman

HARVARD UNIVERSITY—Mr. Clifford H. Moore, Mr. Edwin F. Gay

THE JOHNS HOPKINS UNIVERSITY—Mr. Ira Remsen

LELAND STANFORD JUNIOR UNIVERSITY—Mr. Ephraim Douglass Adams

UNIVERSITY OF MICHIGAN—Mr. James B. Angell, Mr. V. C. Vaughan, Mr. M. L. D'Ooge

UNIVERSITY OF PENNSYLVANIA—Mr. Leo S. Rowe

PRINCETON UNIVERSITY—Mr. A. T. Ormond, Mr. H. A. Garfield

UNIVERSITY OF VIRGINIA—Mr. J. M. Page

UNIVERSITY OF WISCONSIN—Mr. C. R. Van Hise, Mr. Paul S. Reinsch

YALE UNIVERSITY—Mr. Henry Wade Rogers, Mr. Wilbur Lucius Cross

The minutes of the preceding Conference were approved as printed.

The Executive Committee presented as its report the following:

Resolved, That, in the opinion of the Executive Committee, the annual *Journal of Proceedings and Addresses* should be printed in an edition of 1,000, instead of 800 copies as heretofore.

Resolved, That, in view of increasing the edition of the annual *Journal* the annual assessment of members of the Association should be increased to Forty Dollars (\$40), instead of Twenty-five (\$25), as heretofore.

Upon motion, the report was adopted.

The Secretary presented the FINANCIAL REPORT, previously approved by the Executive Committee, and, upon motion, the report was accepted.

Mr. D'Ooge, of the University of Michigan, and Mr. Schurman, of Cornell University, were appointed by the Chair to prepare reports of the meeting for the press.

Upon authorization of the Association, the Chair appointed the following Committee on Nominations:

Mr. Angell, representing the University of Michigan

Mr. Garfield, representing Princeton University

Mr. Moore, representing Harvard University

Mr. Munroe Smith, on behalf of the Special Committee on Aim and Scope of the Association, appointed at the Eighth Annual Conference, presented the report of that committee, made a special order for the First Session of the Conference (see p. 77).

Upon motion, the report and recommendations of the Special Committee on Aim and

Scope was unanimously adopted, and the Universities of Illinois, Minnesota, and Missouri were declared duly elected to membership in the Association.

Upon motion, a special committee consisting of the representatives of Harvard University, Cornell University, the University of Wisconsin, the University of Pennsylvania, and Columbia University, with President Pritchett of the Carnegie Foundation as an additional member, was appointed to continue the investigation of the matters involved in the report of the Committee on Aim and Scope, and the committee was further instructed to consider the eligibility of other American universities, and to take into cognizance in such consideration the entire continent.

The Session adjourned at 12:25 P. M.

The delegates were entertained at luncheon at the University Club at 12:30 P. M.

SECOND SESSION

The Session was called to order at 2.30 P. M., with Mr. Schurman, of Cornell University, in the chair.

The Executive Committee presented a report (see p. 80).

Upon motion, the report was accepted and adopted.

Upon motion, the recommendation as to the instruction of delegates, and the matter of making the delegates of the various universities, if possible, also delegates of the United States, was referred to the Executive Committee, with power.

Mr. Rowe, on behalf of the University of Pennsylvania, presented a PAPER on "The Possibilities of Intellectual Coöperation between the United States and Latin America."

The following delegates took part in the DISCUSSION which followed: Mr. Brewster (p. 22), Mr. Stringham (p. 23), Mr. Reinsch (p. 23), Mr. Rogers (p. 23), Mr. Rowe (p. 23), Mr. Remsen (p. 24), Mr. Cross (p. 24), Mr. Laughlin (p. 24), Mr. Rowe (p. 25), Mr. Stringham (p. 25), Mr. Remsen (p. 26), Mr. Rowe (p. 26).

The Session adjourned at 4:30 P. M.

The delegates were the guests of the University of Michigan at a reception in the Barbour Gymnasium at 5 P. M.

THIRD SESSION

The Session was called to order at 8.30 P. M., with Mr. Schurman, of Cornell University, in the chair.

Mr. Vaughan, on behalf of the University of Michigan, presented a PAPER on "The Part of the Undergraduate College in Preparation for Professional Education."

The following delegates took part in the DISCUSSION which followed: Mr. Vaughan (p. 32), Mr. Schurman (p. 33), Mr. Moore (p. 34), Mr. Schurman (p. 34), Mr. Moore (p. 34), Mr. Schurman (p. 34), Mr. Moore (p. 34), Mr. Page (p. 34), Mr. Vaughan (p. 34), Mr.

Rogers (p. 34), Mr. Schurman (p. 36), Mr. Rogers (p. 36), Mr. Ormond (p. 36), Mr. Schurman (p. 37), Mr. Rogers (p. 37), Mr. Schurman (p. 37), Mr. Munroe Smith (p. 37), Mr. Stringham (p. 38), Mr. Laughlin (p. 39), Mr. Stringham (p. 39), Mr. Rogers (p. 39), Mr. Williams (p. 40), Mr. Vaughan (p. 40).

The Session adjourned at 10:30 P. M.

SECOND DAY'S PROCEEDINGS

FRIDAY, JANUARY 10, 1908

FOURTH SESSION

The Session was called to order at 10 A. M., with Mr. Schurman, of Cornell University, in the chair.

The following delegates were present in addition to those of the preceding sessions:

For The University of Chicago—Mr. H. P. Judson, Mr. Albion W. Small

For the Carnegie Foundation for the Advancement of Teaching—Mr. Henry S. Pritchett

Upon motion, it was

Resolved, That the matter of the standardization of colleges, as provided in the report of the Special Committee on Aim and Scope adopted at the First Session of the Conference, be referred to the Special Committee, as continued, consisting of the representatives of Harvard University, Cornell University, the University of Wisconsin, the University of Pennsylvania, Columbia University, and President Pritchett of the Carnegie Foundation.

The Committee on Nominations reported as follows:

For *President*—The representative of the University of Michigan

For *Vice-President*—The representative of Leland Stanford Junior University

For *Secretary*—The representative of Harvard University, to serve for a period of five years

For additional members of the *Executive Committee*—The representative of Cornell University; the representative of Columbia University.

The Nominations of the Committee were approved, and the officers named were declared duly elected.

Upon motion, the question of time and place of the Tenth Conference was referred to the Executive Committee, with power.

Invitations for the Tenth Conference were offered by the University of Wisconsin, Cornell University, Princeton University, and Yale University.

Upon motion, the University of California was requested to prepare a paper on the relation of undergraduate work to professional work, in respect to the possibility of saving time in secondary education, for presentation at the next Annual Conference.

The Secretary presented the following resolution, which, upon motion, was adopted:

WHEREAS, The Executive Committee of the Latin-American Scientific Congress has determined to make the next congress "Pan-American" instead of "Latin-American;" and

WHEREAS, The Chilean government has extended an invitation to the government of the United States to participate in this congress to assemble at Santiago, Chile, in December, 1908; and

WHEREAS, This congress will serve to bring the best thought and experience of America to bear on the great problems common to all the republics of this continent and will thus serve to strengthen the ties between the American nations;

Be it Resolved by the Association of American Universities assembled in convention at Ann Arbor, Michigan, That the Congress of the United States be earnestly requested to make provision for adequate representation at this forthcoming Pan-American Scientific Congress, as recommended in the Report of Secretary Root of December 19, 1907, and in the special message of the President of December 21, 1907.

Upon motion, a resolution adopted by the Modern Language Association of America, as follows:

Resolved, That it is desirable to adopt some plan of obviating as far as possible the duplication of work in doctoral theses intended for publication, and submitted to the Association of American Universities with a request that action be taken, was referred to the Executive Committee, with power.

Upon motion, it was .

Resolved, That the Executive Committee of this Association be empowered to formulate and put into effect such plans as will tend:

First: To establish closer relations between the universities of Latin America and the institutions represented in this Association;

Second: To establish closer relations between investigators in the different sections of the American continent;

Third: To examine into the conditions under which students from Latin America may advantageously be admitted to the universities of the United States.

Upon motion, the following resolution was adopted:

WHEREAS, The presence of students from Latin America at the universities of the United States tends to establish closer intellectual and cultural ties between the different sections of the continent;

Be it Resolved, That the Association of American Universities would view with much satisfaction the adoption of any plan which will increase the number of Latin-American students in the universities of the United States, and desires to emphasize the great service which would be performed by the establishment of a system of university scholarships for Latin-American students.

Upon motion, it was

Resolved, That a special committee of three be appointed by the Chair to consider and report at the next Annual Conference upon the usage of terms and nomenclature in university catalogues and other documents, such as the words "course," "school," "college," "department," "division," etc.

The Association of American Universities

The Chair appointed as such committee the representatives of the University of Wisconsin, Princeton University, and the University of Missouri.

Mr. Small, on behalf of The University of Chicago, presented a PAPER on "The Doctor's Dissertation—Selection of Subject, Preparation, Acceptance, Publication."

The following delegates took part in the DISCUSSION which followed: Mr. D'Ooge (p. 70), Mr. Carpenter (p. 71), Mr. Cross (p. 71), Mr. Page (p. 72), Mr. Judson (p. 72), Mr. Small (p. 72), Mr. Garfield (p. 72).

President Pritchett, of the Carnegie Foundation for the Advancement of Teaching, addressed the Conference, by invitation of the Chair (see page 76).

Upon motion, the following resolution was adopted:

Resolved, That the members of The Association of American Universities, in session at the University of Michigan, wish to give expression to their deep appreciation of the graceful and thoughtful hospitality of President Angell and his colleagues during the days of their stay at Ann Arbor.

Upon motion, the Session adjourned at 12.25 P. M., *sine die*, after which the delegates were entertained at luncheon at the residence of President Angell of the University of Michigan.

MEETING OF THE EXECUTIVE COMMITTEE

After the adjournment of the Fourth Session, a meeting of the Executive Committee was held in the Engineering Library, January 10, 1908, at 12.30 P. M. The following representatives were present:

For the University of Michigan, *President*—Mr. Angell

For Leland Stanford Junior University, *Vice-President*—Mr. Adams

For Harvard University, *Secretary*—Mr. Moore

For Cornell University—Mr. Schurman

For Columbia University—Mr. Carpenter

Upon motion, it was

Resolved, That the matters referred by the Association to the Executive Committee may be treated in the usual manner by correspondence.

Resolved, That the invitation for the Tenth Conference extended by Cornell University be accepted, the time of such conference to be subsequently determined by the Committee.

The Committee adjourned at 12.35 P. M.

THE ASSOCIATION OF AMERICAN UNIVERSITIES
PAPERS AND DISCUSSIONS DURING THE NINTH ANNUAL
CONFERENCE
SECOND SESSION

THE POSSIBILITIES OF INTELLECTUAL COÖPERATION BETWEEN
NORTH AND SOUTH AMERICA

PAPER PRESENTED ON BEHALF OF THE UNIVERSITY OF PENNSYLVANIA BY MR. L. S. ROWE

In 1551, almost a century before the establishment of any institution for higher education in the United States, the first American university was established in the Peruvian capital. For more than a century after its establishment the University of San Marcos of Lima was the center from which radiated the influences that led to the foundation of higher institutions of learning throughout the central and southern sections of the continent. Originally founded by the Spanish crown and placed under the immediate supervision of the church, these institutions drew their inspiration and received their intellectual stimulus from Spain.

With the emancipation of the colonies from the mother country over two and one-half centuries after the founding of the first university, the intellectual influence of other European countries, notably Italy and France, began to make itself felt. The reorganization of South American universities which took place during the early decades of the nineteenth century was undertaken in accordance with the dominant French influences of the period. These influences still determine their organization and method of instruction. Until within comparatively recent years the curriculum was patterned after European models; and even in the study of scientific questions the distinctive problems of this continent were neglected. This condition of affairs was due in large part to the fact that those members of the university faculties who were giving all their time to university instruction were recruited from abroad and the native professors, to whom, as a rule, university instruction is but an incident in their professional duties, followed the standard set by their foreign colleagues. Within the last two decades, however, a new spirit has begun to make itself felt among the higher institutions of learning of South America. Through the influence of a number of educational leaders, attention has been called to the distinctively national problems, and especially to the necessity of bringing the universities into closer touch with national life.

It is at this point that the influence of the universities of the United States for the first time begins to make itself felt in South America. The close adaptation of our higher institutions of learning to the ever-changing needs of national life has been held up before the

Latin-American universities as an example of the important part which the university should and, if it is to fulfil its mission, must play in the life of the people. With this desire to bring their universities into closer touch with the life of the people there has also come an awakening to the fact that the republics of this continent, because of the peculiar conditions under which they were settled and because of the peculiar economic and political conditions that have accompanied their growth, present a group of problems different in many respects from those of continental Europe, or in fact, of any other portion of the globe. It has taken a long time to make clear the far-reaching international obligations involved in this community of national problems. The experience of each country contains many lessons, positive and negative, by which the nations of this continent may profit. Furthermore, the spirit of mutual helpfulness growing out of such interchange of service will contribute materially toward the development of a real continental public opinion, the attainment of which will constitute the greatest safeguard to the peace of this hemisphere and indirectly to the peace of the world.

As a result of this clearer appreciation of the possibilities of an interchange of experience in grappling with fundamental national problems, there is evident a growing desire on the part of educational leaders in South America to bring themselves into closer touch with the educational system of the United States and to foster closer relations with our universities.

It seems strange, and at first almost inexplicable, that we, in the United States, have failed to pay any attention to the great currents of South American thought. In our ignorance of conditions in this section of the continent we have grouped all the countries under the common name of South America and have taken for granted that conditions are so primitive that no intellectual or scientific movement of importance is to be looked for. The vastness of our own country has led our universities to devote themselves to the distinctively national problems, and little or no thought has been given either to our relations with the other sections of this continent or to the possibility of securing from them valuable scientific material.

Even in this assemblage it will probably be surprising to many to learn that in each of the countries of Latin America there is a group, and in many a large group, of earnest investigators who have made and are making important contributions to scientific thought. Until recent years these investigators have failed to utilize the vast fund of valuable material which their own countries offer, but there is now noticeable amongst the younger generation a marked desire and determination to concentrate attention on the distinctive scientific problems of their respective countries. We may, therefore, confidently look forward to a period of scientific fruitfulness which will throw a new light on many of the problems which are now absorbing the attention of investigators in the United States. There is something inspiring in the thought of bringing the combined scientific effort of the American continent to bear on the great political, social, economic, and racial problems which confront the nations of this hemisphere.

The discussion of our relations with South America has been limited almost exclusively

to commercial considerations. It has been taken for granted that intellectual intercourse would follow on the heels of closer commercial relations. We have, therefore, been content to postpone the consideration of this phase of our continental position until such time as the growth of commerce has brought us into closer touch with the people of Latin America.

The most cursory examination of the Latin-American situation will show that the theory which has guided our attitude is erroneous. Until comparatively recent years England has practically dominated South American trade, yet English intellectual influence has been so slight that it hardly deserves consideration. On the other hand, France with but an insignificant commercial position has exerted a powerful influence over the thought and action of the people of Latin America. It is generally supposed that this is due to the close racial affinity between the Spanish and the French. That this is not the true explanation is attested by the growing intellectual influence of the Germans who are now supplanting the French, solely because of the concerted effort which both the German government and the German people are making to strengthen their position in this quarter of the globe. Germany has been ready and anxious to send her officers to reorganize the South American armies, and she has shown herself no less ready to send her schoolmasters and schoolmistresses to reorganize the lower and higher schools of these countries. Although German commerce has made great strides, her advance in moral and intellectual influence is not to be traced to this fact, but rather to the determined effort that she is making to place her best intellectual forces at the service of the South American republics.

There has been much irresponsible talk about the designs of Germany on South America. Not only is there a lack of any present indication of such designs, but even supposing the acquiescence of the United States, Germany lacks the elements with which to support such a movement. The Germans settled in South America, while anxious to preserve their German traditions, could not be relied upon to support any attempt at the extension of German dominion. The really significant fact is that Germany's intellectual influence in South America is growing so rapidly, especially in the educational field, that German ideas, German culture, and the German point of view now dominate the educational systems in the more important sections of South America. This fact possesses a deep and far-reaching significance and constitutes a far greater achievement than a territorial foothold.

Germany's success contains a lesson of much importance to the United States. It is evident to everyone who has watched the development of national feeling in South America, that the time has come when we must view our position on this continent with a far keener sense of the responsibilities which it involves. We must shape our policy not merely with a view to the present but with reference to our standing among our neighbors ten and twenty years hence. It is idle to suppose that the iteration and reiteration of our good intentions will satisfy the peoples of Latin America. They have to a very large extent overcome their distrust of the purposes of our government. In its stead there has developed a feeling of admiration for the wonderful progress of our country, its energy and initiative, and a sincere desire to profit by our example.

This new spirit finds its most distinct expression in the almost universal demand for American teachers and American educational methods. In the few instances in which the American system has been introduced it has produced most excellent results. A remarkable confirmation of this fact was impressed upon me while traveling through the northern provinces of the Argentine Republic. In 1869 President Sarmiento, who, as you may remember, was a close friend of Horace Mann, engaged the services of five or six American teachers and placed in their hands the organization of a normal school in the city of Parana. The founders of this school are now dead or pensioned, but during the last four decades it has exerted a marked influence on educational methods throughout the Republic. This one school has contributed more than any other agency toward developing a respect for American methods and strengthening a desire to profit by American experience. There is a real feeling of national gratitude for the teachers whose pioneer work served to place the Argentine educational system on a higher plane of efficiency.

When a handful of teachers can accomplish such results, we begin to appreciate the far-reaching influence of a concerted and well coördinated effort to extend such educational service and the desirability of formulating further plans for the establishment of new and even stronger intellectual ties. As a first step in this direction I beg to submit for your consideration three possible lines of activity.

First, the better preparation of American teachers for service abroad. Both Porto Rico and the Philippines furnish excellent preparatory training for service in South America, but the number of teachers available is relatively small. Our normal schools would do a great service in giving to Spanish a more prominent place in their curriculum and in giving to teachers a better idea of the history and civilization of these Latin-American countries. But more important than these changes, which are relatively simple and easily effected, is the development of a more ready adaptability on the part of American teachers. In this respect the German still outranks the American. We are in many ways unpleasantly provincial in our attitude toward the foreigner, and fail to show that ready sympathy with a point of view different from our own which has done so much to make the German and German methods important factors in South American affairs.

Secondly, we must make a more concerted effort to attract a larger number of South American students to our normal schools and universities. It is true that much has been done during the last ten years, but we have but begun to realize the possibilities of service in this respect. Today the natural trend of South American students is still toward Europe, in spite of the fact that our institutions offer a training better adapted to the conditions prevailing in these republics.

The opportunity now presents itself, as it has never presented itself before, for the universities of the United States to perform a great national service which will do more to draw the countries of South America closer to us than any one thing that can be done at the present time. If a group of our leading institutions were to establish a series of scholarships for Latin-American students it would be interpreted as the clearest indication of the good-will

and friendly feeling of the American people. The governments of the South American republics are beginning to send students to the United States, but the number desiring to come is far in excess of the available appointments. The presence of a considerable body of Latin-American students cannot help but benefit our university life. They give to our students a closer acquaintance with the point of view of the Latin-American peoples and thus destroy many of the prejudices which now exist. The personal ties formed during the university years serve to prevent the recurrence of those misunderstandings which in the past have, from time to time, marred our relations with the republics of South America.

In this work the International Bureau of American Republics in Washington will be of the greatest service. The Pan-American Conference held in Rio in 1906 adopted a plan for the reorganization of this bureau and as an integral part of this plan provided for the establishment of an educational bureau, which should serve as a clearing-house of educational information for the republics of this continent. The present director, Hon. John Barrett, is anxious to broaden the usefulness of the bureau wherever possible, and the universities of the country can be assured of his cordial support in any plans that they may adopt. Heretofore the educational leaders of South America have had considerable difficulty in securing complete and trustworthy data concerning educational methods in the United States. Through the Bureau of American Republics the machinery is now being devised through which such information will be readily and speedily available.

Thirdly, the establishment of closer relations between the universities of North and South America and between individual investigators in the various scientific fields.

During an extended tour through South America I had the opportunity to discuss with university authorities in the different countries, a plan for the establishment of such relations. I found everyone with whom I spoke not only prepared but enthusiastic in their acceptance of any plan that would bring them into closer touch with the universities of the United States. As a first step the following tentative plan was agreed upon with the National University of La Plata, the National University of Chile, and the University of San Marcos, of Lima:

1. To arrange for the exchange of all university publications.
2. The establishment in each institution of a Scientific Bureau, the duties of which shall be
 - a) To serve as a center of information for investigators in the republics of the American continent.
 - b) To serve as intermediary between members of university faculties pursuing similar lines of investigation.
 - c) To undertake with specialists the arrangement of simultaneous investigations on topics of interest to scientists in the various countries.
 - d) To furnish information concerning university courses, methods of instruction, and control of students.
3. The establishment of a "Foreign Students' Information Bureau," whose duty it shall be to furnish full information concerning every phase of university life and also to receive foreign students, extending them every facility upon their arrival.
4. The inclusion of material relating to the development of American political institutions in the courses in American history, constitutional law, administrative law, political economy, sociology, and compara-

tive legislation. The main purpose of this plan is to give to university students some notion of existing conditions and to arouse in them such interest as will lead to independent investigations.

As an indication of the fact that the South American institutions are keenly alive to this movement for university coöperation, it will interest you to know that I have just received a circular letter which the National University of La Plata is about to send to sister institutions at home and abroad embodying the plan which has just been submitted to you.

This project for university coöperation has several distinct ends in view. In the first place there are the scientific purposes to be subserved. We have hardly begun to appreciate the wealth of scientific material which South America affords. I will confine myself to the one field of investigation with which I am acquainted—the study of political institutions. The constitution of the United States has had a marked influence on the development of political institutions throughout South America. This is particularly true of the federal republics, Brazil and the Argentine, but it is also true, although to a lesser extent, of the unified states, such as Chile, Bolivia, and Peru. The student of political institutions is thus afforded the opportunity of examining the operation of similar constitutional provisions under totally different conditions, and is able to study the relation between constitutional form and constitutional fact from an entirely new view-point.

There is a very common and widespread belief that the republics of Latin America have had no constitutional development worthy of the name, that they have passed from revolution to revolution, and that the constant instability has prevented any approach to orderly institutional growth. It is, therefore, a matter of some surprise to the student of political science to find in the constitutional history of these countries a vast fund of valuable material which throws a flood of light on the development of democratic institutions and their relation to inherited political ideas.

Even the revolutions have a deep constitutional significance. In most cases they are the political expressions of deeply rooted social changes and must be so interpreted in order to grasp their true significance. In spite of occasional setbacks the leading countries of South America are developing political institutions which within a comparatively short time will be as firmly established as our own. The upheavals that occur often mark the steps in this process. With each year public opinion is becoming more organic and is extending its control over governmental affairs. As soon as the history of South American countries is studied with the same care and detail as the history of the United States, we will find that the political institutions of these countries have passed through stages of development quite as clearly defined as those through which our own institutions have passed. All this means a vast fund of material for the student of political institutions.

Material of equal value is to be found for the study of race problems and racial relations, archaeology, medicine, hygiene, and public sanitation. In order fully to utilize this material it is important that investigators in different sections of the continent be brought into close relation with one another. Through such united effort the contribution of this

continent to the world's knowledge will be greatly increased, and a new spirit of solidarity established.

The approaching Pan-American Scientific Congress to be held in Santiago, Chile, in December, 1908, furnishes the opportunity to our universities to show, through their participation in the work, that they appreciate the possibilities involved in closer coöperation for the solution of the many scientific problems that we have in common. The cordial and fraternal spirit in which the invitation to the United States government has been extended expresses the desire of the people of Latin America for a closer and more fruitful community of action with the people of the United States.

This congress has heretofore been exclusively Latin-American. The determination to make it Pan-American is but one of the many indications that the feeling of continental solidarity is gradually making itself felt. The congress will be divided into nine sections, to each of which it is hoped that the United States will send one or more representatives. The personal ties formed among investigators at such a gathering will make it possible to undertake parallel inquiries in different sections of the continent; and it is but reasonable to expect that such inquiries will throw a new light on many vexed questions. Through this contact scientific associations in different parts of this hemisphere will be brought into closer touch with one another and the activities of all thus rendered more fruitful. This congress will, I believe, mark an epoch in the intellectual relations between the republics of the American continent.

In considering the various plans herewith submitted due weight must be given to the broad national interests involved as well as to the immediate scientific advantages which they present. International relations are today determined by the intellectual sympathies that exist between nations. We draw nations toward us in proportion as we do them service, and we are today placed in a position to be of incalculable service to the peoples of South America. Their greatest present need is a more thorough organization of the common-school and higher educational system. Our own experience contains many lessons by which they may profit. There is no need to foist our methods on them. On the contrary, they are ready and anxious to avail themselves of the best that we have to offer. At no time in our history have the universities of the United States had a better opportunity to do a service of national, yes, of continental import. No agencies are better adapted to this purpose.

In the development of this spirit of continental solidarity our universities will add another to the series of national services that they have performed. The time is not far distant when the Latin-American republics—or at least the more important amongst them—will be powers of real magnitude, whose support the United States will require in the realization of those ideals of international justice for which our government has so long striven. We cannot hope to have their support unless we are able to establish closer intellectual and moral bonds between them and the United States. The spirit of continental unity which we must try to establish does not imply the slightest antagonism toward Europe nor against European institutions. It is simply the recognition of the elemental fact that America can

best make her contribution to the world's progress by addressing herself primarily, and with unity of purpose to those national and international problems which are either peculiar to this continent or for the solution of which the conditions are peculiarly favorable. The republics of this continent will thus best make an adequate return for the inheritance which they received from Europe.

DISCUSSION OF INTELLECTUAL COÖPERATION BETWEEN NORTH AND SOUTH AMERICA

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. BREWSTER: I found myself, on my recent arrival in South America, very much surprised, especially at Buenos Aires and Argentina, to see how admirably the educational system has been developed. There are in Buenos Aires many excellent primary schools and several high schools, the teachers of which are capable and possessed of an admirable spirit. The people of public spirit and intelligence are more than ready in Argentina and Chile to coöperate in any way with educational institutions in the United States for the general intellectual advancement of this western hemisphere. I myself did not observe the same spirit in Bolivia, a country unfortunately largely given over to alcohol and ignorance. Through the efforts of our minister and others their educational interests will advance. In Bolivia I did not visit Sucre where the supreme court sits and where there are cultivated people, nor Potosi where many people of the same kind live.

The term "University" does not mean the same thing the world over. There are institutions called universities that are very little more than our high schools. The University of Cuzco and the University of La Paz seem far from being real universities, but the University of Santiago and the Catholic University of the same city are superior institutions with fine faculties. There are connected with these institutions men who have been educated abroad, who speak English admirably as well as four or five other European languages, and who are just now in a condition to receive delegates from our own universities with open arms.

In Buenos Aires, Santiago, and Valparaiso, the newspapers are of a high order; and one reads with pleasure and profit the contributed articles which are equal to the papers that appear in some of our reviews. There are no glaring headlines. The sober, intellectual character of their newspapers is one of the indications of what those people are doing and have done and are ready to do. We must not go to South America in any patronizing spirit. The people there are ready to receive all the help we are ready to give, yet they are so constituted, as is very clearly evident in trade relations, that they want to a great extent to have their own way. That is why the Germans with their adaptability to South American conditions are getting the advantage of everybody else.

There is no greater work that this Association can undertake than to coöperate in this approaching congress at Santiago. And it will not only be of advantage to the people there—a generous contribution on our part to their intellectual development—but we will have our attention called to some things that in the busy development of our own country we have neglected; we will find that they have a history, constitutions, laws, and institutions from which we may learn much.

MR. STRINGHAM: We are somewhat closely allied to certain Spanish populations in California and have paid attention to the teaching of Spanish in our schools and smaller colleges, and the commercial relations have of course contributed to that end to a considerable extent. We send many of our graduates to Mexico, especially to the mining industries; and you will find in California probably a hearty coöperation for promotion of the plans that are here outlined.

MR. REIN SCH: It seems evident that the opportunity which is now presented will probably not occur again. Just at this time the South American nations are filled with pride at the record made by their representatives at the Hague Conference. That is a welcome surprise to the world in general. It was of course known that they would send able men, but no one probably foresaw that such an important part in the deliberations of the Hague would be taken by the South American delegates; and some persons think that the result will be a more close connection between South America and Europe, to the disadvantage of North America. I do not believe that will be the case; and the invitation which has just come to make the South American Scientific Congress Pan-American is proof to the contrary. The Latin-Americans have in cultural matters taken their cue from Europe. The relations between France and Germany and South America are very close, but the young and progressive people of South America are looking to the United States as a model in methods in the arts and applied sciences; and among the young men of South America there is a widespread desire to come to this country to study. What is needed is a sympathetic attitude on the part of the people of the United States in judging of the special culture of South America. The institutions which this Association represents can do more than any other agency in making the American people realize the true promise of conditions in South America. In order to bring that about there will have to be personal contact. This Association affords opportunity for creating such contact. It will not be wise in this period of financial depression to rely too much upon an appropriation by Congress; and the institutions themselves should face the probability of meeting this contingency of sending representatives to South America at this time.

It would be desirable to bring some of the South American leaders of thought to the United States. That could easily be done by coöperation between the universities. If each one should contribute \$100 on the basis of which a South American professor would be invited to come to this country and give one or two lectures, that would be sufficient to meet the expenses. South American university men will make an impression upon the nation; and their view of our institutions will make an impression upon them which will probably do more to bring about this sympathetic coöperation which we are striving for than any other arrangement. The subject of the responsibilities and opportunities of our nation with regard to South America is certainly one the importance of which cannot be overestimated.

MR. ROGERS: Yale invited a distinguished gentleman who represented Brazil in the Hague Conference to deliver a course of lectures this coming year at Yale. The invitation was declined temporarily, I think, because he found it impossible to prepare the lectures. But I have heard it said, that there was no man at the Hague Conference who impressed himself upon that conference with more force and more ability than the representative from Brazil.

Informal discussion on the cost of sending delegates to the Pan-American Scientific Congress and the route to be taken followed.

MR. ROWE (in reply to questions): I know the University of Chile was looking for a man

from the United States for their Agricultural School; and if men were available in this and other fields they would be called. The difficulty is to find men who speak Spanish. There is one very large school in the Argentine Republic for which an American head master is being sought. The South Americans who go to Europe to study turn their attention largely to medicine and engineering; they go to Belgium for engineering and to Paris for medicine. German influence is of recent growth.

I am inclined to doubt the wisdom of appointing as delegate to this Scientific Congress a South American graduate of any one of our universities. Any such plan would rob the representation from the United States of its proper influence in the Congress. The delegates from the Latin-American Republics would not regard these men as representative of the United States.

MR. REMSEN: In October two Cubans presented themselves for admission to our university. The man who came with them was an intelligent man of German descent, but could not speak German. He wanted his boys to study medicine at Johns Hopkins. There had been some correspondence with our registrar, and through a misunderstanding the boys were perhaps encouraged to come. When we came to look into their preparation, although they were both Bachelors of Arts of the University at Havana, in good and regular standing, it was found that they could not possibly be admitted to the medical school, and further, they could not be admitted fairly into our collegiate department. We were misled because we misunderstood their credentials. We thought it fair to keep them awhile before sending them off. They were not prepared. They were conditioned all along. They had elaborate diplomas, with beautiful seals.

MR. CROSS: Our recent experience at Yale has been in the line of the experience at Johns Hopkins. We had one man from Central America a year or two ago; he was unable to do the work in the scientific school and soon fell out. This year we have a man who came from Honduras, a Bachelor of Arts from a university, with a diploma such as has been described. We decided to let him enter the second year without any examination, to take his credits provisionally, to watch him and to see what he could do. We found he was unable to cope with the mathematics of the second year and did not really succeed in anything, so we have dropped him back into the freshman class; and it is still the opinion of his instructors that he will not be able to do the work. There was a long list of subjects which this man had to his credit; but he could not pass in mathematics in our scientific school. Still I would not lay too great stress on these two instances.

MR. LAUGHLIN: Our experience in Chicago has been very much like that detailed by the several speakers, and yet it does not seem to me to touch the essence of the problem before us. It is only an indication of what has been already suggested by Professor Rowe in his statement in regard to those institutions, that very few of them are of university character. Obviously students that come from institutions giving inadequate instruction will not succeed very well in our universities, but that does not seem to me to militate against a careful consideration of the plan. On the contrary it seems to me to indicate all the more the opportunity for impressing American standards, scholarship, and methods of instruction upon those institutions of South America. That there is a little stream of students coming now is only an indication of the interest of the Latin-American people in our universities; and, if closer relationship existed between those universities and ours, we could probably get better men and better instruction from them; but a long time must elapse before they develop their institutions to a place where they can furnish us satisfactory graduate students. There is not likely to be as much practical result in this direction as in some others that

have been referred to; the close social, political, and economic relations that would result between the north and south from better understanding on both sides is the most important consideration. On that I think too much emphasis cannot be laid.

This, too, is the psychological hour in which to set in motion the proper movement. President Hadley (in Berlin) was presented with statistics as to the falling-off of American students at the German universities. President Hadley said this was an easily explicable thing on the ground that American students found greater satisfaction in American universities. We can go to South America and speak of the advantages we offer, and do it with the knowledge that our universities would enable us to give the South Americans admirable training; and if their students should come here properly prepared, they would get as good training as in Germany today.

I suggest that the Executive Committee should see that there should be something like symmetrical arrangement of the delegates for the various institutions in the various subjects. Otherwise two or three institutions might nominate men in the same subject. Therefore for the benefit of the scheme the Executive Committee might properly make some such distribution of delegates as would cover the various fields.

MR. ROWE: It is not quite fair to judge the higher institutions of Latin America by a graduate of the University of Santo Domingo or Honduras. Students coming from Chile and Argentina are better prepared than those from some of the smaller countries. Furthermore, the fact that a certain number come unprepared is all the more reason why we should make some effort to get into closer touch with the educational systems of these countries, with a view to influencing this preparation. It is true that many of the Latin-American countries are now bringing teachers from abroad, but a foreign teacher can never get into close touch with the people for reasons partly temperamental and partly cultural. Our universities certainly have a deep interest that the men who are going to organize and conduct the schools of South America should be trained in this country; and the obligation is upon them to make some special effort to bring these students under the influence of American institutions. It would be well in dealing with students who arrive with inadequate preparation to adopt some special plan in order to enable them to remedy their deficiencies.

MR. STRINGHAM: We have had long experience in California for twenty-five years with these students. The larger portion of them have gone into the mining school, and we have a considerable list of graduates in that department from as far south as Brazil. They do frequently come unprepared to enter the university properly. We place those cases in the high school if necessary. There are a number of good high schools in affinity with the university. The students who come from China, and some others, we have placed under public guardianship in various schools in different parts of the state. Some of these men have been directly in charge of the president, some have been placed in charge of other members of the university, through whom the funds are disbursed.

The larger number of students we have coming from other countries to take advantage of our educational facilities have come because of industrial interests and its relations. Very few come because of any higher intellectual interests. They have come to prepare themselves for active occupations of some sort in the industrial world at home, and they have gone back into work of that sort. We have had, especially in industrial mining, men from South and Central America who have graduated and gone into work of that kind, so that I look for a larger number of students to come for purposes of that sort; intellectual interests are likely to come later on.

MR. REMSEN: I should like to see representatives of the United States at the congress to bring

about these better relations. Suppose the government of the United States does not make the appropriation at all, how many universities are going to make an appropriation of \$1,500 or \$2,000 to send a representative to that congress? Further, the limitations are very great. The men sent there ought to understand Spanish and be able to talk with the people, or else they will not do much in the way of cultivating personal relations.

How are we to determine the class of delegates that shall be sent? We want men who will fairly represent this country and make themselves agreeable. That is the kind of delegate we want. How many delegates from these fifteen universities will be likely to be appointed who will accomplish that object? I don't make these remarks with the idea of opposing the carrying out of this program, for I wish it might be carried out. But I don't know how this is to be worked out. If the United States will appropriate the sum asked for and then ask these universities to appoint the delegates, there is some chance of getting a proper delegation.

MR. ROWE: If this scientific conference had taken place last year, four of our institutions might have been represented, California, Michigan, Columbia, and Pennsylvania. Each year there will be a number of university men traveling in South America, and it may be possible, therefore, even if Congress fails to make the appropriation, to secure representation from some institutions.

THIRD SESSION

THE PART OF THE UNDERGRADUATE COLLEGE IN PREPARATION FOR PROFESSIONAL EDUCATION

ADDRESS ON BEHALF OF THE UNIVERSITY OF MICHIGAN BY DR. VICTOR C. VAUGHAN

I think it will be better for me to confine my remarks to the desirability of providing for pre-medical instruction in the undergraduate courses of our universities. Upon this part of the subject I may speak with some definite knowledge. I am not sufficiently familiar with the educational needs and requirements of the other professions to justify me in including them. I hope that this limitation which I place upon my remarks will not be interpreted as a desire to exploit my own profession or its importance in educational matters, to the exclusion of the professions of law and engineering, for such a motive I am sure does not actuate me.

In starting out it will be best to try to get some correct idea of what modern medicine is, and how its fundamental and basic facts are acquired. I will therefore offer the following definition: Modern medicine consists of those facts gathered from the various sciences that can be utilized in the prevention and cure of disease.

The sciences that contribute most largely to medical knowledge may for convenience be divided into two groups.

The first group includes those sciences that have always been considered so exclusively medical that their support and development have, by common consent as it were, been left wholly to the profession. This does not imply that the methods of research or the details of instruction in these sciences differ in any material way from those followed in other lines, nor does it mean that only practical and utilizable facts are sought. Anatomy, both human and comparative, concerning itself with the structure of the animal body, has always been a science especially cultivated by the medical man, and by extending anatomical research to the microscopical structures histology has been developed. In like manner the study of the structure of the fetus has given us the science of embryology, and from the study of structure as altered by disease has come pathology. Physiology, physiological chemistry, and hygiene belong to this group. In all good medical schools these sciences are not only well taught, but research along these lines is being carried on with a degree of success that is creditable not only to the profession but to the country.

The sciences that constitute the second group upon which medicine depends, although largely developed by the researches of medical men, are in and of themselves so fundamental to all the other sciences, and have contributed so largely to other professional applications that they have long been regarded as constituting the domain of general science, and their support and development, as well as instruction in them, have been intrusted to the departments of general science in the universities. These fundamental sciences are biology, including botany and zoölogy, chemistry, both organic and inorganic, and physics, including that most interesting borderland science designated sometimes as chemical physics, and again as physical chemistry.

As has been stated, the science of medicine consists of the facts furnished by the discoveries made in the several sciences constituting these two groups that can be utilized in the prevention or cure of disease. Medicine can develop no faster than its contributory sciences. It is always ready and alert awaiting each scientific advance, and happy if in such advance it can find the means of making its own work more exact and satisfactory. Theoretically it often is in advance of scientific discovery, but for positive demonstration it must await such discovery. For hundreds of years, even before the beginning of the Christian era, it was believed by many of the brightest medical men that the infectious diseases are disseminated by a *contagium vivum*, and the logical reasons for this belief, as stated in the second century before Christ, are perfectly sound, but the demonstration of the particular infecting agents had to await the discovery and development of the compound microscope. With this instrument which extended man's vision, Pollender, Davaine, and others saw in the blood of animals sick with anthrax bodies that could not be found in the blood of healthy animals, and the labors of Pasteur, Koch, and others developed the great science of bacteriology. Medicine becomes exact and positive just as the sciences that contribute to it furnish it with the means, and as it reaches greater precision there is less room for doubt, hesitancy, and difference of opinion. Twenty-five years ago two equally skilful medical men may have differed as to whether a patient under their combined charge was suffering from tuberculosis or not; now,

a microscopical examination of the sputum settles the question. In like manner the diagnosis of many of the infectious diseases may now be made with certainty. It is no matter of mere opinion that the plague has existed in California for some years past; it is a demonstrated fact. The error made by certain medical officers in 1898 in pronouncing the prevailing disease in the military camps in this country malaria was easily shown to be error, and the fact that the disease was typhoid fever and not malaria has not been and cannot be questioned. The exactness that scientific medicine has reached along certain lines is surprising. The development of the kryometer by which low temperatures are measured to one ten-thousandth of a degree has enabled forensic medicine to accomplish some remarkable things. A dead body is found in the water and it is a question whether the individual was drowned, or the body thrown into the water after death. A determination of the freezing-point of the blood from the two sides of the heart settles the matter, for if the individual has been drowned the blood in one side will be more dilute than that of the other, and consequently the freezing-point will more nearly approach zero. By determining the rate at which the freezing-point of the blood falls, the time that the body has been in the water can be determined in days or hours. By the precipitin test the species of animal from which a blood-stain came, although the stain may be a hundred years old, can be determined with certainty. In like manner and with like certainty the source of a few drops of milk, whether from woman, cow, or other animal, or of a small bit of flesh, can be determined.

The discovery and application of instruments of precision in the study of disease processes have been of great service to medicine, and only men of scientific training are competent to use these aids. I have already referred to some of the results that have been obtained from the kryoscopic methods, and, I may add, this line of work has also proved of value in determining the efficiency of certain organs, especially the kidneys. The discovery of the X-ray has made the recognition of certain surgical lesions and the location of foreign bodies positive, and the medical profession has already quite thoroughly tested the curative possibilities of this unknown agent. When we turn to chemistry it will be admitted at once that there could be no science of medicine, certainly none worthy of the name, without the chemical contributions. The chemist need not be a medical man, but the medical man must be a chemist; and medicine has developed the science of physiological chemistry—a science whose problems are physiological and whose methods of research are chemical. All the secretions and excretions, liquids and solids of the animal body have been most carefully and repeatedly submitted to chemical analysis, and the mysterious vital force of our ancestors has disappeared in the light of these investigations. The nutritive constituents of foods have been determined and their calorific value figured out to a nicety. The relation between chemical constitution and physiological action has been and is being investigated, and chemical methods are employed in problems of nutrition, in making diagnoses, and in the treatment of disease. There are many reasons for believing that the problems of medication, immunity, and heredity are, in their last analysis, questions of chemical composition and structure.

The importance of a knowledge of zoölogy and of botany to the student of medicine is well understood. The teacher of human anatomy is by no means content at the present time to confine himself to the structure of man; he must show how each structure has developed, beginning often with avertebrate types. The embryologist has supplied one of the strongest supports of the theory of development, and practically every structural anomaly in man can be accounted for by the student of comparative anatomy. The medical man who wishes to gain information from animal experimentation, and no other line of work has yielded a richer reward, must know not only the morphology of the animal upon which he experiments, but its physiology as well, wherein it differs from and wherein it conforms in structure or function to the corresponding organs in man. Much has been accomplished by a study of the nervous system in this way.

Botany has supplied medicine with some of its most valuable therapeutic agents as quinine in malaria, more truly specific than any other remedial agents in our possession until the discovery of diphtheria antitoxin. However, the medical man's interest in botany is not confined to his search for curative agents, he must go back to the plant for his first lessons in metabolism. How does the plant synthesize the amino-acids from nitrates and carbohydrates—a process which apparently the animal, certainly the vertebrate animal, cannot effect. Then, how does the plant synthesize the amino-acids into proteids—a process which is also carried on in the body of man, but in what organs and through what agencies we do not know.

It is not necessary to advance additional evidence for my claim that while the specialist in any one of these sciences may know but little or no medicine, the medical man must have a sound basis knowledge of each of these subjects. These branches are very properly taught in the undergraduate courses of our universities and they are not taught with sufficient thoroughness elsewhere, therefore the medical school must look to the university to give this instruction to prospective students of medicine, and to announce to such students that the medical schools require this work for admission. Moreover, it should be understood that no substitutes for these sciences will be accepted for admission to the medical school. The medical school must go back of the university diploma and ask of the student how much physics, chemistry, and biology he has had, because a knowledge of these is essential to the study of medicine. Should the university give specially arranged courses in these subjects? By no means. We want no medical physics, medical chemistry, or medical biology. We want our students to be thoroughly grounded in the basic principles of these sciences. Some specialty in physics that today has not the slightest recognizable touch with medicine may next year meet with applications of the greatest service and of wide range. To try to teach certain isolated facts in any science is of doubtful service, and this is not the kind of training that the medical schools are looking for.

To sum up this part of my argument I offer the following statements: (1) Medical education in this country has reached a stage when it must demand of its matriculates a good sound training in physics, chemistry, and biology. (2) The extent of instruction in

these branches demanded is beyond that given in even the best of our secondary schools, and it must be obtained in our universities or schools of technology. The instruction should be largely in the laboratory, and as a minimum each of the three sciences should require one-half the student's time for one semester, and more than this should be given if the student has had no proper training in the elements of these branches in the secondary school. (3) Knowledge of these subjects is essential to the satisfactory study of medicine, and no substitutes for them can be accepted. (4) The best medical schools cannot accept for matriculation the Bachelor's degree even from our best universities without going back of the degree and ascertaining how thoroughly the student has been grounded in these sciences.

I wish now to pass to a wholly different group of studies that the student should master before he begins his medical work, and a part or the whole of which he is not likely to acquire elsewhere than in the undergraduate department of the university. I refer to German and French, a reading knowledge of both being necessary to the satisfactory study of medicine. I am fully aware of the fact that many a great medical man has known only English, and I am also convinced that there is much more medical knowledge recorded in our own language than any one man can digest. But there is much in German and French, and the student who goes into medicine without the ability easily and intelligently to read these languages labors under a handicap, and in some lines he is cut off from the best sources of information. Take for instance the department of forensic medicine, and the man who cannot read *Annales d'hygiène publique* or *Vierteljahrsschrift für gerichtliche Medicin* cannot go very deeply into the subject. The same is true of physiological chemistry if the pages of *Zeitschrift* and *Beiträge* be denied one.

The statement is sometimes made that all the really valuable research in medicine or in any other science done in foreign countries finds ready translation into English. Unfortunately this is not true. Not one of the great papers of either Pasteur or Koch has, so far as I know, been translated into English. Their results have been translated into many languages, but the thorough student wants all the steps that have led to the results, and they have never been given in English. The man who is simply informed of the final triumphal discovery of the method devised by Pasteur for the treatment of hydrophobia knows nothing of this great investigator's methods or his lines of thought; indeed, he gets nothing of special educational value out of his knowledge. He has no comprehension of the spirit of the research. It is a rare exception to have an English translation in full of any important medical research done by a foreigner. I believe that the American scientist, be his work along medical or other lines, has potential advantages over all others on account of his catholicity. He is free from the national prejudice that is so conspicuous even in the scientific contributions of our German confreres. He will not be bound by dogma, whether it be promulgated at Berlin or at Paris. However, it is certainly true that at present American medicine has a distinct Germano-philic tint due to the fact that we rely so much upon Germans for medical knowledge. This of course is regrettable, and can be avoided only by a greater familiarity with the literature of other lands, in which our own should be included,

for so great is the dominance of German medical research in this country today that it is in part, at least, true that a research made here gains but little credence among ourselves until it crosses the ocean and comes back stamped "approved in Germany;" and I think that the Germans have been stamping their wares so long with "made in Germany" that they sometimes forget to change the first word on the stamp. These are, however, so far as Americans are concerned, only evidences of juvenility and will disappear as the nation grows older and wiser.

While speaking of the need the medical student has of sufficient knowledge of German and French to be able to read these languages easily and intelligently I must say that the medical teacher who tests his students' knowledge of these languages is quite universally disappointed. There are very few graduates, excluding those of foreign birth and parentage, even of our best universities, with credits of two years or more in French or German who can utilize this knowledge in their medical studies. I am not able to say why this is true. I have some ideas but they may be wrong, but as a medical teacher who meets with this deficiency in his students every day, and who deplores it greatly, I am going to make some suggestions. The study of the foreign language is not begun early enough. It should begin in the first year of the high school, and better still in the primary grade. In the universities the teaching of French and German is made too much a matter of drill in grammar. The professor is so anxious lest his students should not speak the language correctly that he avoids this danger by leaving them in such a state that they can neither read nor speak it at all. I am fully aware of the fact that Scylla and Charybdis are both here, for the student who has been taught by the so-called natural method, while he may have a vocabulary, knows his grammar so imperfectly that he translates nothing accurately, and accuracy is essential in scientific work. So it turns out that my advice on this point is without value, and I leave the matter with the many able teachers of the modern languages in our universities, with the request that they improve their product.

Personally I believe strongly that a good thorough drill in Greek and Latin adds greatly to a young man's fitness for the study of medicine, but I have gone into this subject elsewhere and will refrain from reiterating my views upon it. I deny myself the pleasure of speaking in favor of the classics all the more willingly because many of my medical friends whose diagnostic ability I greatly respect shake their heads when I talk upon this subject, and say that I certainly belong to a past generation, and, like most men of my age, I am beginning to feel somewhat sensitive when this charge is made.

In conclusion, permit me to say that it is the purpose of the medical educators of this country, especially those in charge of medical departments in the universities, to require at least two years in the university in physics, chemistry, biology, and the modern languages for admission to the medical school, and we ask your support in this movement for the betterment of our profession.

DISCUSSION OF THE UNDERGRADUATE COLLEGE IN PREPARATION FOR PROFESSIONAL EDUCATION

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. VAUGHAN: I have placed a few charts before you. One shows the number of students studying medicine in the United States in the different years since 1880. Since that time there has been a very marked increase in the total number of medical students in this country until two or three years ago, and the number is now falling. The high-water mark was reached in 1903. It is difficult to explain this decrease. It is frequently said that hard times make for professional education, that then men are not tempted to go into business but into the professions. There seems to be some argument in favor of this from the greatly increased number from 1890 to 1900. The number of irregular students has not increased. The next table shows the difference between the number of students and the number of graduates, which is striking, because earlier they were in school only two years before graduating and now they are in four years; but there is the same general increase from 1880 to 1903 and a decrease since.

In the Council of Medical Education in the United States we have been compelled to look into the high schools. In this chart the states in blue are those that hold four years in the high school preliminary to the legal profession, and in most of those states the four years in the high school follow one or other of the courses recommended by the Committee of Ten. Not every school in each of those states is equally good, but we expect naturally to find students coming from those states well prepared as far as the secondary education is concerned. Pennsylvania is the only state north of Mason and Dixon's line which has no four year high school course, nor does it have an eight year course preceding the secondary school. It has a seven year course, so that no good medical schools recognize high school work done in Pennsylvania. Why Pennsylvania has not moved in this matter I do not know. It has been suggested that it is owing to the large number of normal schools in that state. There is a very gratifying list of states which are rapidly changing from a three year high school course to a four year course.

Another chart shows the power of legal enactment in controlling medical education in this country. State control over licensing to practice medicine has been a most vital force in uplifting medical education in this country. States in blue are those that have reciprocity; by that I mean that a man who passes the New York examination, for example, can go to Texas and present his credentials and be admitted to practice without examination. I believe there is no state in the Union now that permits the practice of medicine without some examination or examination of credentials. Massachusetts, Rhode Island, and Pennsylvania will not accept the credentials of other states nor will other states accept their credentials.

The last chart represents states that have a legal right to refuse any man an examination; they have the legal right to go back of diplomas, and may deny him absolutely the right to an examination if he is a graduate of a school which they do not approve. That law is based on this: the examination is oral or written, and, if it were passed at the bedside or in the laboratory, it would be all right. But a man can go to a quasi-school and never look through a microscope, probably never dissect a human body, and still pass a good examination. That is no real practical test of the work which the student has had. Any state can send its delegates to the various medical schools in the country, inspect them, and, if they are not properly equipped, not allow graduates of that school

to come back for examination. Any state has the legal right to say what a reputable medical school is, and determine whether it is reputable by its equipment and the opportunities it furnishes the student to do his work.

The chart below shows the time devoted to the preliminary and medical education in this country, in Sweden, Germany, the ideal of the American Medical Association, and the training of the university medical schools which begins the preliminary schooling at five years of age. The pupil goes to the primary school until he is thirteen, then has four years in the high school, then gives four years to the college, and four years he gives to medicine. There are two medical schools in this country which have that requirement, Johns Hopkins and Harvard. There is one school, Western Reserve, that demands three years in the collegiate department, then four years of medicine. Notice that the average student under the best conditions possible, if he takes his common school, high school, and liberal arts and medical courses, is twenty-five years old when he gets through. There are six medical schools with two years required in the literary or scientific department and one with a one-year requirement. These numbers will greatly increase within the next year; the number six will jump up to nearly forty and the number four will run up to nearly thirty. One hundred and ten medical schools in 1907 took students directly from the high school. There are about three that require one year less; and there are thirty very poor schools, most of them irregular, that permit students to enter before they finish their primary grades. That is the present condition of medical education in the United States. In Sweden the student graduates in medicine at the end of his twenty-third year. In Germany it is difficult to figure this out, because students go from two schools into the university; but in reality, although the German student is supposed to have five years in medicine, he does not have that, because his first two years are largely taken up with chemistry and physics; and it is really a combined course just as we have here. There are five years of study of medicine, two of which is a mixed course; then there is the hospital year added on to that. There is considerable complaint among German universities just now because they are turning out a good many men who after they finish their course in the university in order to avoid paying for the thesis and other fees amounting to 400 marks go to the Staats Medicin and practice medicine without graduation; and this number is rapidly increasing. In most cases we will not examine a man before he has his diploma, but in Germany he can have his examination whether he has his diploma or not. It is not so great an evil in Germany because there is a practical examination there. The ideal of the American Medical Association is one year of physics, chemistry, and biology, four years in medicine, and then a hospital year. That graduates a student at the end of his twenty-fourth year and he has had his hospital year. Apparently the medical schools in this country are coming to this requirement; primary course eight years, high school four years, two years of the combined course, four years in medicine and a hospital year. That brings the student up to the same age that it does in Harvard and Johns Hopkins, but the student has had his year in hospital work, so that really he gets into the practice of medicine a little earlier.

MR. SCHURMAN: Do not graduates of Harvard and Cornell go to the medical school at the end of the third year and so reduce the course? We have opposed shortening the course. If a student is taking only the Arts degree, he takes a four year course; but, if he is going into a professional course, we permit him to substitute one year of the professional course, so that the man will be in the same position as one who takes three years in Harvard and then enters the professional course.

MR. MOORE: Men may complete the course in Arts in three years. A considerable number come from preparatory schools which give some college work. We require one modern language, French or German, for admission. In case the student had not already taken the other modern language he must take it after he comes in. Some schools send up their students with both French and German, and that anticipates one course of the first year.

MR. SCHURMAN: We do not allow a man to complete a course without the four years' work.

MR. MOORE: The Arts course itself is not acceptable unless it includes chemistry.

MR. SCHURMAN: It is the same at Cornell.

MR. MOORE: The position of the paper in relation to chemistry, etc., is exactly the position every one of us should take no matter what graduate school we are speaking of. I should be just as much interested in having those who come into the graduate school in Arts and Sciences possess some knowledge of chemistry, biology, and physics. A student cannot get on without French and German also.

MR. PAGE: At the University of Virginia, we have been deeply interested in the report of the Council of the Association of American Medical Schools. The report has caused renewed discussion of the question of how much preliminary college work can be required, in our part of the country, for admission to the professional courses. Up to the present time, we have only succeeded in requiring one year of college training of the student who enters the Department of Medicine—that year's work covering the elementary collegiate courses in chemistry, biology, and physics. We notice that the Chicago congress suggested that a year of college work in elementary chemistry, biology, physics, and German should be required for admission to the regular course in medicine. That would not be practicable at Virginia; there will be no difficulty about arranging, when the time comes, a satisfactory two year college course as prerequisite for the study of medicine; but the average high school graduate already has rather more than he can satisfactorily accomplish, when he undertakes the college courses in chemistry, biology, and physics in one year; and he would be completely submerged if a fourth course—as German—were added to the requirements.

It will be a long time before a B.A. degree will be required at a southern state university for admission to any four year professional course. It is expected, however, that the University of Virginia will soon advance her requirements for entering the Department of Medicine to two years of college work; and I am confident that admission to the Department of Law will then be placed on the same basis.

MR. VAUGHAN (in reply to questions): It is important to have the hospital work. I hold it is criminal to allow a young man to go out and practice medicine, no matter from what school, until he has practiced medicine in the hospital or dispensary under the supervision of somebody. I do not think it is right to allow young men who have not done anything in the way of prescribing to go out and practice on the public. They ought to have one year of hospital or dispensary work or something of the kind. Possibly this year could be included in the four year course at a medical school with excellent laboratory and hospital facilities.

MR. ROGERS: The table shows there has been a decrease in the number of medical students in recent years. It is known to every person in the room that the figures collected by the Bureau of Education at Washington show that the number of students studying in the theological schools of the United States is steadily decreasing year by year and has been for the last ten years. These figures will show on the other hand a very remarkable increase each year since in the number of

students in the law school. In 1890 the figures show the number of law students in the United States to have been about 3,500 and the number has steadily increased, until in 1907 the number of students in the law schools was 17,000 and over.

Dr. Vaughan said the states were reserving to themselves the right to go behind the diplomas of the schools of medicine. The Association of American Law Schools has again and again entered its protest against the admission of students to the bar on their law degree. In the states in which that is still done—and done substantially under the influence of the law schools themselves—those in authority over the schools are mistaken in supposing that the interests of the schools are subserved by the admission of students upon diploma. The American Bar Association, too, disapproves of that practice very decidedly; first, upon the ground that it is really injurious to the schools themselves, and tends to a lowering of the standard of scholarship; second, that it is irregular, inasmuch as admission to the bar ought to be in the hands of the courts; and, if students can be admitted to the bar upon diploma of the law schools, it is practically depriving the courts of their power to pass upon their qualifications.

The question of terms of admission of students to law schools is a very important one. It is only within comparatively a short number of years that any examination whatever has been insisted upon either for admission to law schools, or for graduation from them. Harvard, the oldest of the law schools in this country, did not require an examination for degrees until 1871, and none for admission until 1877. It is a curious thing that for more than a quarter of a century in the University of North Carolina they have refused to give a degree in law to anyone who did not have an A.B. degree. It did not make the possession of the A.B. degree a condition for admission to its school. A man without it and I think one who has not studied at all in an academical college may be admitted and take the course, but is not graduated with the LL.B.

There are at the present time in this country about 125 law schools. I should say that 75 out of that number now require a three year course, and two, one an old school established in 1847 at Lebanon, Tennessee, and another small school connected with Mercer University, only insist upon a one year course, and the other schools have a two year course. But the American Bar Association did not until about ten years ago recommend to schools of the United States that they should have a three year course. When that was done the majority of the schools rather reluctantly acceded to it; they thought that the number of students would seriously decrease in their schools. On the contrary the effect was to increase the number of students.

As to requirements for admission, it is unfortunately the case that the law schools in the South almost without exception (the University of Texas and the law schools in the state of North Carolina are notable exceptions) admit students without any examination. But the Association of American Law Schools and the majority of the American Law Schools insist upon a four year high school course as a condition for admission. The question as to what ought to be the requirements for admission to the law schools is now the most serious question with which the law schools are dealing; and the Committee on Legal Education at the last meeting of the American Bar Association which was held in Portland in August last recommended to the American Bar that two years of a college course at least be required as a condition of admission. The Bar Association has not acted on that report, but will undoubtedly take action at its next meeting.

There is only one school, the one in North Carolina, which absolutely requires a degree in arts as a condition. At Harvard and Columbia, while it is nominally required, it is possible for a man to

acquire the law degree without the A.B. degree; but it works out so that very few get it, as they must obtain honors to succeed. Wisconsin, Yale, and one or two other schools have established the requirement of two years of a college course, and the Universities of Texas and Washington have established a one year requirement. I was very much pleased with the action taken here this morning in connection with the Universities of Missouri and Illinois, in seeing the disposition to insist that hereafter the universities which are to be recognized by this Association must require at least one year for admission to graduate courses. I wish they had said two years.

MR. SCHURMAN: The report does insist on a longer period; it provides that the joint arts and professional work shall in every case aggregate at least five years, and it uses the alternative five or six. But when we had before us the question of admission of these universities, and when the largest and richest of them had only a one year requirement in law, it was thought wise to show a certain amount of leniency in administering a new law which many institutions might think severe. It is the hope of the committee, however, that it would not be continued. If there is to be an aggregate course of five years in arts and professional work that means two years of a college course.

MR. ROGERS: In the matter of insisting upon a college degree as preliminary to the law school the attitude of Yale is well understood. It is not at all a financial question; Yale's attitude is simply this, that to insist upon the A.B. degree as a condition of admission to professional schools is to postpone to too late a period the entrance upon active life of the young men in this country. A two year course in college added to the course of law or medicine gives the American going into the law or medical schools as good preparation as is obtained by the European in those schools. (In reply to a question.) A man may during the latter part of his academic course take one year in the law school and credit it on his law degree. He must study law three years. He may thus get the A.B. and law degrees in six years.

MR. ORMOND: Princeton has no professional schools, although we may have one day, and our excuse is that we are a young university, being only eleven years old as such. We cannot be expected to have traveled the whole gamut of university experience in that time. There is a general agreement here regarding what the essential elements are that should be conserved in an educational course. We are all ready to say this, that we do not think that any scheme of education whether from the professional point of view or otherwise will be satisfactory that does not include in it a liberal education. There are a great many ways of getting at the same result. The idea of a liberal education and the idea of a degree are not necessarily equivalent, although the ideal professional course would be one in which the A.B. had a place, or that which would indicate a four year course of a liberal education, the ordinary college course. That would be the ideal; and, where it is possible to realize it, it ought to be realized. It is another question whether this requirement can be secured in a two year course or a three year course, or whether we can dovetail the professional and liberal, by making the last year of the liberal count as a year in the professional course. It has not yet become axiomatic, as a primary need in our education, that the course should be shortened in order to enable our young men to get into professional work at an earlier period than they would be able to get in by completing a course of liberal education, because there are other elements that enter into the necessary qualifications for success in any of the professions than the mere results that are gotten from the course of study. There is an element of practical judgment, a certain maturity of mind, which is a prime factor in professional success. We cannot

say with assurance that a young man has attained to this maturity until ordinarily he is twenty-four or twenty-five years old. For this reason I do not fall in with the tendency to minimize the time spent in liberal studies in order to get earlier into professional work.

MR. SCHURMAN: In the paper from the medical department it was said that certain subjects not included in the medical curriculum of four years are necessary in the medical course; and, if they did not exist in the liberal arts course, it would be necessary to provide them. These are physics, chemistry, and biology, and also French and German. These courses would fill up the larger portion of the first two years; consequently very little time would be left for those other subjects to which reference has been made for the promotion of liberal culture.

MR. ROGERS (in reply to questions): Any lawyer would say that there is no subject taught in the academical college that it would not be to the decided advantage of lawyers to know something about; but it is particularly true that a man who is to practice law, if he expects to be a lawyer of any marked standing and capable of handling great cases which come before the Supreme Court of the United States, must be a man who is thoroughly grounded in history, constitutional history, and the history of our political institutions, and also in economics. He ought to know something of medicine and something of chemistry, and English, too. There is not anything he ought not to know something about. Yale in prescribing these new requirements does not say that a man shall actually have had two years of academic training, he may have an equivalent of that. One of the subjects which is spoken of as equivalent is philosophy.

MR. SCHURMAN: In one of the later chapters of a work by the late James C. Carter it is said that every student of law should have had a course in ethics. That reminds me of a conversation I had with him in which he said, "The courses which I took at Harvard which have helped me most as a lawyer were ethics and philosophy." I repeated the remark afterward to Mr. Charles A. Dana, and he paused a moment and said, "The subjects that have helped me most as a journalist of all I have ever taken were classics and mathematics."

MR. MUNROE SMITH: I think every lawyer will indorse Dean Rogers' statement, that there is no subject that may not be of advantage to a lawyer in his practice. In *Guy Mannering*, Sir Walter Scott has drawn, in the character of Pleydell, his ideal of a lawyer. Explaining to a client the presence in his office library of the best editions of the best authors, and in particular an admirable collection of classics, Mr. Pleydell says: "A lawyer without history and literature is a mechanic, a mere working mason; if he possesses some knowledge of these, he may venture to call himself an architect." But as a result of the circumstances under which legal education has developed in this country there is one body of studies which have become, in a special sense, prerequisites for legal study. American law students were at first trained exclusively in offices; and the first law schools grew out of the circumstance that certain lawyers were so peculiarly successful in guiding their students and accordingly drew about them so many students that it became necessary to deal with them as classes and to organize a regular curriculum. The aim of the American law school has always been intensely practical; its curriculum has always been narrowly professional; and inasmuch as the part of the law that is most actively used in legal controversies is private law, I think we may say that the curriculum of American schools has been a private law curriculum, criminal law being the only part of public law that has been extensively studied. In this respect our law schools—even our university law schools—differ from the law schools in continental Europe and in those countries that have taken their civilization from continental Europe. The European law

course is one of public and private law; and public law is studied with the same attention and care as private law, although it does not demand the same amount of time. In general, I believe, about one-third of the student's time is devoted to public law. In this country there has indeed been an improvement in this matter. Of late years administrative law has been more and more studied in our law schools; but constitutional and international law do not as yet receive the amount of attention they need. It is the general expectation that a man shall have had a general view of constitutional and international law in his college course. Accordingly these studies have become prerequisites for the proper prosecution of law studies in the American law school. As long as this state of things continues it seems to be desirable that at least three years of college shall be required for admission to the university law school, for that is the minimum time in which the college student can gain any adequate view of history and economics and public law. I do not think that this is the ideal system. I think it would be better to organize a four year law course, in which public law should be taught by lawyers and not, as in college, by men who know little of private law. If the law school were thus organized, it would probably be unnecessary to insist upon more than two years of college as a condition of admission.

MR. STRINGHAM: There are three difficulties which confront us here; one is the difficulty of preparing our young men for the actual practice of life at a sufficiently early age; another is to get in as much of liberal culture as possible previous to study for the profession; and the third is so to plan the program that the student shall not be obliged to give himself to his profession before he knows what his profession ought to be. We find for example in many cases our young men deciding what profession they are going to study for before they leave the high school. We propose to begin the work of preparation for the university two years earlier than is provided on Professor Vaughan's chart. We have got our schools outside the high schools, below the high schools, we have got our superintendents to agree that in California at least a more radical change takes place in the method of instruction in schools at the end of the sixth year than at the end of the eighth, and more children leave school for good at that point than at the beginning of the high school. That has led us to propose to our school authorities that the work of the last two years of the grammar school shall be essentially high school work; and we are introducing into those grades classes in Latin and in the modern languages. Some of our most enthusiastic pupils in the grammar schools in those grades are those who are studying French and German. This means a somewhat radical change in the selection of teachers, for we shall have to send into those grades graduates from the university who alone are eligible as teachers in the high schools. That at once as you can readily see relieves the pressure at a very important point. A good beginning in the study of languages at that age will clear the way for the introduction of special sciences before the pupil reaches the high school. He will have laboratory work before he reaches the high school and in a large number of cases more. So that for the medical student we propose exactly what Dr. Vaughan has outlined, physics, chemistry, and biology; but we expect them to begin that work in the high school and do a good portion of it before they come to us.

Under our present plan the work for the engineering school, through the high school and the university to the very end of our program, is prescribed for the student. The only possible solution of the difficulty there is the extension of the course in engineering to at least five years and probably in the end to six years. Our first step will be the introduction of the fifth year and the requirement of the general liberal education extending up through the primary year, so that the

beginning proper of preparation in mathematics and in sciences fundamentally shall begin at the junior year. It may begin earlier if the student so choose.

Our plan for the first two years in college is that the students shall have a choice from subjects which are recognized as furnishing the elements of liberal culture; and these will not only be for the prospective lawyer, but also for the prospective engineer. The work will not be for all alike; the program must include certain essentials, foreign languages, history, mathematics, sciences, but there is as large a variation before the student as possible. The object is to leave it open for the student to make his choice and change from one to another as late as possible, so that he may not be obliged to commit himself too early to his chosen profession. We shall give for that eight years, probably six years of secondary and two years in the college. A certificate which we call a junior certificate is given for the completion of what we might term in a general way the secondary education of the student. The last year will then be devoted to special subjects which the student himself shall choose. (In reply to a question.) We are going to prescribe substantially a six year high school course beginning at 12 years of age.

MR. LAUGHLIN: There seems to be a tendency in academic training to get into the professional education early, to assume that we must shorten necessarily the years of college work which cover the usual liberal arts course, and to feel that the beginning period of that arts course is a fixed period. In comparison with German results it is unmistakable that the essential loss in the work preceding entrance to college in American education is probably not less than two years. In order to get into the professional school early something has to be clipped off from the liberal college course. The essential problem, however, is to drive home upon secondary schools the necessity of improving the work and getting more out of the years before they come to college. The way in which we are now attempting to solve it by allowing a year or two years of college work to be used toward the professional degree is in my opinion deadly, based solely on expediency, and on the belief that we cannot rectify or influence the work preceding entrance to college. If we can drive the forces of secondary education to realize the responsibility to give us certain things, we will then have practically all the results of four years of liberal arts and our professional training too, and get into the professions practically two years earlier. Therefore Professor Stringham's account as to what they are doing in California is the most important thing that we have had narrated to us. It bears directly upon the very fundamental question of the relation of the undergraduate work to the professional schools, and it shows how they are really rising to this emergency. Because the University of California is in a position to influence legislation in that state, they may give us a practical illustration of the way in which the secondary schools can shorten the time of preparation for college, and thus allow graduate students to enter professional schools earlier than now without the evil of counting the same work for two degrees.

MR. STRINGHAM: The form in which that matter will work itself out is that the junior will select for his Bachelor degree a major. If he is preparing for medicine it would very likely be in physiology; if he is going to study law it will very likely be a major in jurisprudence; if he is going to study engineering his major will be in scientific work, higher mathematics, and physics. The student would spend at least two years more on his professional course in law, in medicine—or in engineering. We shall at first insist upon one year and later we shall find out how much we can require more.

MR. ROGERS: Brown University recognizing that certain law subjects have cultural value

introduced into the curriculum some years ago certain of those subjects with a view of shortening by one year the period for admission to the bar. But I noticed recently that they had dropped that out. The lawyers on the Board of Trustees, among whom was Governor Hughes, recommended that it should be dropped on the ground that it was not possible in Brown University nor in an institution that did not have a law school to teach law subjects in a satisfactory manner, and that it would be much better for young men to go to a law school even if they had to spend an extra year, than to have it taught in such a university.

MR. WILLIAMS: The tendency in engineering education today is rather against specialization. That is, specialization is not being carried to the extent that it was a few years ago, and that results in the more general preparation preceding it. There is no question among engineers that the engineering student lacks the general culture which is likely to be required of him if he enter the higher occupations which are open to him after graduation. The great economic question whether he can afford the time to acquire such training is the one that is being discussed at the present moment. Our better engineering schools can well afford to insist upon a considerably longer course than that which has been in vogue up to the present time. Our course here is four years for only about 25 per cent. of the men, for the reason that unless a man is really all of an average student he is not likely to get through in four years, and, if he fail to do that he is able to take a considerable amount of additional work in making up his five years. The present senior class in civil engineering has been depleted by nearly 20 per cent. by men who will not take their degree until a year from next June instead of next June. They are taking subjects outside the regular requirement, and when they do take their degree there is not much doubt that they will be better prepared than men who take their degree with their class this year. We should lengthen our courses to six years and put in about two years of subjects along the line of general culture. We need more chemistry, physics, modern languages, and English, than we have. We want also history and some law, though the engineer does not wish to apply law from the lawyer's standpoint, nor does he want it purely for its cultural value. We want modern languages to the same extent that the medical man does. Whether a boy will come to a school that insists upon six years of work before his degree in engineering can only be established by trial. All my own observation leads me to believe that he will, and that the first school that does it inside of three or four years will have such a lead on the rest of them that they will all follow suit.

MR. VAUGHAN: No student is prepared to graduate from any university or any department until he has done a certain amount of research work. The student never knows the pleasure of labor until he works out some problem largely for himself. He must find that he is doing it for himself and that he is getting at the bottom of it. Isn't it true that a majority of students graduate without ever feeling what a research student only can feel, that he has probed that subject to the bottom and knows as much about that as any man in the world? Would not the universities of this country be better if we had three year courses for the student, who should then do some original problem before he received his degree?

FOURTH SESSION

THE DOCTOR'S DISSERTATION: SELECTION OF SUBJECT, PREPARATION, ACCEPTANCE, PUBLICATION

PAPER PRESENTED ON BEHALF OF THE UNIVERSITY OF CHICAGO BY ALBION W. SMALL

In the Columbia University *Quarterly* for June, 1904 (p. 255), Professor Edward D. Perry publishes a sketch of the history of the degree of Doctor of Philosophy in the United States. The paper begins with the remark that "the establishment of the degree of Doctor of Philosophy in the United States is entirely a work of the second half of the nineteenth century," and it reaches the following conclusion:

The question is often asked nowadays: Does the German degree still hold its pre-eminent place of a score of years ago, or has the American degree come to be of equal value? The question must be answered differently for almost every case that is considered, and it is yet too soon for a generalization of any great value. The German degrees vary very greatly among themselves in difficulty of attainment, though much less so than those of this country. For many years the degree in philosophy has been thought hardest of attainment at Berlin, and many students, German as well as American, who have done practically all their work in Berlin have gone elsewhere for the degree, partly because of the difficulty of the requirements, and partly also because of the expense. At some of the smaller German universities degrees in philosophy could be taken, up to a few years ago, on rather exiguous terms. Americans who have taken their degrees in Germany even at one of the more noted and exacting universities are sometimes heard to speak slightlyingly of the demands made upon them there, forgetting that for many years most of the German university authorities were notably complaisant toward our countrymen, accepting them and graduating them on terms impossible for Germans to secure. Of late years the requirements have been enforced more impartially. The Johns Hopkins doctorate has from the first been about as difficult of achievement as any German degree, except perhaps those of Berlin and Bonn; and the same is now true of possibly half a dozen universities in this country.

All in all, the history of the development of this degree in the United States is one of the most striking indications to be found anywhere in the field of educational effort of the intense desire for advancement and improvement characteristic of the enlightened American. How seriously the attempt has been made, and how courageously persisted in, to get the best in the world of science, becomes vividly clear when one contemplates in comparison the slight success that has so far attended the efforts to establish "research degrees" at the English universities.

Professor Perry also remarks (p. 264): "In the matter of requirements for the degree, the leading American universities do not differ greatly, at least in essentials." My readings in the literature of inquiry into the inducements offered by various universities, dispose me to conclude that the clause should be amended so as to read: "The requirements do not differ greatly, at least on paper." There are certain apparent variations even from this ostensible regularity, e. g., the time requirement of Harvard, Pennsylvania, Yale, and Princeton, according to the printed regulations, seems to be one year less than that of the majority of

the members of the Association. In practice, however, the difference probably disappears. Professor Perry generalizes correctly: "The requirement of a bachelor's degree from a reputable institution, or its full equivalent in academic training, as a prerequisite for admission to study for this degree, is practically everywhere demanded."

The elasticity in this requirement is not located primarily in the standards proposed by the members of this Association for their own work, but in the actual interpretation of the term "reputable," as applied to other institutions. The effects of the possible variations appear in creating ungraded graduate classes, with the result that the work actually carried on is adjusted to the pace of persons prematurely classified as graduates, and perhaps never as mature as the length of their nominal graduate residence would imply. I receive frequent letters from graduates of colleges whose work our examiners can credit for at most only three-fourths of our requirements for the Bachelor's degree, and sometimes much less, but these applicants state that such and such a university within this Association has given the Master's degree to graduates of that college at the end of one year of graduate residence. In so far as this is the fact, it eventually affects the work for the Doctor's degree, and in particular that part of the work which is the subject of this paper. It is not a part of the inquiry assigned to me to ascertain how far the state of things referred to exists, or to what extent it modifies the actual requirements for the Doctor's degree. The bearing of the allusion is simply this: On paper, the conditions for the Doctor's degree in the universities of this Association appear to be substantially identical. In practice, the variations in the conditions probably amount to more than is visible, and more than could be indicated by statistics. In respect to the single important item which I am to consider, the dissertation, differences in regulations about *publication* amount to considerable variations of conditions. It is impossible to measure the quantity of this difference. In other respects the formulated differences in requirements affecting the dissertation are not striking. The following facts are presented for what they are worth in guiding our judgment upon the subject.

REGULATIONS GOVERNING THE DOCTOR'S DISSERTATION

For the purpose of this inquiry the following letter was addressed to the Presidents of the Universities in the Association:

DEAR SIR: For use in a report to be made to the Association of American Universities, will you at your earliest convenience kindly send the facts for your university upon the following points:

1. Total number of Ph.D. degrees conferred, beginning with 1893.
2. Regulations governing Doctor's dissertation, including (a) its ratio of value among conditions for the degree; (b) rules about publication.
3. Total number of Doctor's dissertations published since 1893.
4. Reasons which account for failure to publish.
5. In what particulars, if any, does the University regard the Doctor's dissertation as an unsettled problem?

From the replies received, the facts under question two may be tabulated as follows:

California, Harvard, and Yale alone excepted, the printing of the dissertation is required under the following conditions:

California: One hundred and fifty copies of each thesis or memoir accepted for the Doctor's or professional degrees must be deposited in the university Library. . . . Every candidate is required to furnish the stated number of copies for the Library before receiving the degree, unless an extension of time be allowed by unanimous consent of the Graduate Council.

Dissertations for the higher degrees shall be typewritten or printed. When printed . . . there shall be furnished the Library as many copies, not less than twelve and not exceeding one hundred and fifty, as may be determined by the Sub-Committee in charge of the candidate together with the librarian on the Editorial Committee.

Catholic: Students who do not print are required to make sufficient deposit to cover cost of printing. Two hundred copies required for library.

Chicago: One hundred printed copies of the thesis must be deposited in the Library within six months of the date of the final examination. A student is eligible to examination only after he has presented to the Dean (a) a written certificate from the principal department concerned that the thesis is ready for the printer, and (b) the written evidence of some responsible journal or publisher that the required number of printed copies will be furnished the University within six months of the date of the Convocation when the degree is conferred.

Clark: (a) 100 copies for library. (b) However, in case of a dissertation of unusual length, or containing expensive plates, the Faculty shall have power, at the request of the candidate, to reduce this number of presentation copies to fifty. (c) The presentation copies of the dissertation must be in the hands of the librarian before the diploma is delivered. (d) The dissertation shall be printed at the expense of the candidate, and the required copies deposited with the librarian within one calendar year after the first of October following the examination. The candidate alone will be held responsible for the fulfilment of these conditions.

Columbia: (a) Apparently allows candidates rather greater freedom than the other universities to complete the dissertation after residence requirements are satisfied and the examination is passed, but, (b) 150 copies are required to be deposited before the degree is conferred. A smaller number is accepted in special cases.

Cornell: (a) 50 copies required for Library. (b) Unless the printed copies be previously deposited in the university Library, a typewritten copy of the thesis must be bound and delivered to the Registrar on or before the Friday preceding the Commencement at which the degree is conferred. The diploma for the degree is held until the required number of printed copies be deposited.

Harvard: (a) The degree of Doctor of Philosophy or of Science is given, not for the mere reason, &c. . . . , but on the ground of long study and high attainment in a special branch of learning, manifested not only by examinations, but by a thesis, which must be presented and accepted before the candidate is admitted to final examination, and must show an original treatment of a fitting subject, or give evidence of independent research. (b) A successful candidate is allowed to print his thesis as one accepted for the degree, with the certificate of approval over the signatures of the approving committee; and either a printed or a written copy of the thesis and the original certificate must be deposited in the Library, and must be open to public inspection. The president's secretary writes, "I am unable to inform you as to the total number of Doctor's

dissertations published since 1893. I have no doubt, however, that the majority of the whole number have been published."

Johns Hopkins: (a) The candidate shall print the dissertation in full or in part; if in part, to the extent of not less than twenty-four octavo pages, and these twenty-four pages may contain either an abstract or a section of the dissertation, under the supervision of his adviser, within one year from the time when the degree is conferred, and shall present one hundred and fifty copies of the work to the university. (b) If the required number of printed copies have not been presented to the university, a deposit of \$50 to insure the printing within the specified period shall be made by the candidate at the treasurer's office before the degree is conferred. (c) If the required number of printed copies shall not be presented to the university within the specified time, the Board may declare the deposit forfeited, and may apply the amount in printing such portions as the adviser may deem proper.

Leland Stanford Jr.: The candidate must file with the Registrar a bond of \$100 as a pledge that he will within a year deposit with the librarian of the university one hundred printed copies of the thesis.

Michigan: (a) Deposit of \$50 guarantee required. (b) 150 copies to be presented to Library, but in case this would work hardship, the requirement may be waived.

Pennsylvania: The thesis, if accepted, must be printed, and 250 copies must be delivered to the Dean before the candidate is recommended to the Board of Trustees for the degree. Exceptions to this rule may be made by the Executive Committee, but in no case will an exception be made unless the student be able to guarantee to the satisfaction of the Committee that the thesis will be printed within a limited period.

Princeton: (a) The thesis, if accepted, must be published by the candidate before the degree can be conferred. (b) Number of presentation copies not mentioned in printed regulations.

Virginia: The most recent rule regulating publication is that the dissertation must be published, and a hundred copies deposited in the Library before the degree is conferred, or else a sum of money sufficient to print a hundred copies must be deposited with the Bursar.

Wisconsin: The successful candidate is required to put his thesis into print, and to deposit one hundred copies of the same in the university Library. The diploma may be conferred before the thesis is printed, provided a written or typewritten copy bearing the approval of the Administrative Committee is deposited with the university librarian, and the sum of fifty dollars is deposited with the secretary of the regents as a guarantee of subsequent publication.

Yale: (a) The degree of Doctor of Philosophy is conferred upon those students (of either sex) who show the results of resident graduate work by a thesis giving evidence of high attainment and power of investigation, etc. (b) The sum of fifty dollars is appropriated by the university toward defraying the cost of publication in separate form of each thesis submitted for the degree of Doctor of Philosophy which is recommended for the purpose by the expert reader of the thesis in question. (c) The total number of Doctor's theses recommended for publication under this appropriation since its establishment in 1903, including 1907, is fifty. (d) This appropriation does not extend to the many theses accepted, in whole or in abstract, for publication in scientific or other scholarly periodicals. It should be said that the vast majority of theses offered in science have been published in the journals.

DOCTORS' DEGREES AND PUBLISHED DISSERTATIONS

| | Doctors' Degrees Conferred since 1893 | Dissertations Published |
|--------------------------|--|----------------------------|
| California..... | 35 | 18* |
| Catholic University..... | 18 | 14 |
| Chicago..... | 449 | 309 |
| Clark..... | 98 | 92† |
| Columbia..... | 402 | 385 |
| Cornell..... | 242 + 18 D.Sc. 420 + 14 D.Sc. | 141 + 17 |
| Harvard..... | 505 | 432 |
| Johns Hopkins..... | 22 | 19 |
| Leland Stanford Jr..... | 86 | 50 |
| Michigan..... | 308 | 166 |
| Pennsylvania..... | 35 | 35 |
| Princeton..... | 33 | 33 |
| Virginia..... | 107 | 48‡ |
| Wisconsin..... | 421 | ... |

* Two others have been printed but not filed.

† The six still unpublished are by graduates of 1907.

‡ The number is not accurately known, but the president's secretary estimates it at "more than one-half."

§ "The regents hold on deposit forty-three items of \$90.00 each, to secure future publication of accepted theses."

RATIO OF VALUE OF DISSERTATION

Quite likely the question about the "ratio of value" was ill-advised. It is evident from the meager returns that the members of the Association do not apply a quantitative measure to the value of the dissertation. It is also evident that a creditable dissertation is always required. The testimony is as follows:

California: There is no established ratio which fixes the relative value of the thesis work of a candidate.

Catholic: No answer.

Chicago: A legend is current in the faculty that the thesis counts as one-third, and the remaining graduate work as two-thirds, in estimating a candidate's fitness for the Doctor's degree. In practice neither the thesis nor the other work secures the degree unless both are satisfactory.

Clark: No answer.

Columbia: No answer.

Cornell: It would be impossible to state in any definite way the ratio of the value of the dissertation to the other conditions for the degree—that is, residence, study, and examinations.

Harvard: Rules do not explicitly state ratio of value of dissertation.

Johns Hopkins: It is regarded as of prime importance.

Leland Stanford Jr.: No answer.

Michigan: The thesis is of great importance. . . . It is expected that the preparation of an acceptable thesis will usually require the greater part of an academic year.

Pennsylvania: There is no fixed ratio of value for the Doctor's thesis, save that it is one of the necessary requirements in partial fulfilment of the conditions for the degree.

Princeton: We do not fix a "ratio of value" for the dissertation, beyond making it an indispensable condition which must be fulfilled before the candidate may take the final public oral

examination. Our rule requiring publication is absolute, because we think no dissertation ought to be accepted which is not sufficiently important and excellent to be published. We believe the enforcement of this rule tends to eliminate inferior dissertations. We also think publication is most desirable, because it submits to public scrutiny the standards of our several universities, whether for criticism or imitation; because the absence of publicity creates suspicion; and because such publication is the due introduction of the young Doctor of Philosophy to the world of scholars.

Virginia: There is no ratio of value among conditions for the degree. The dissertation is an absolute requirement, and so is the passing of examinations on prescribed courses. Failure in a single examination would prevent the acquirement of the degree, no matter how good the dissertation. Similarly, the degree would not be conferred without an acceptable dissertation, no matter how well the examination had been passed.

Wisconsin: No answer.

Yale: No answer.

REASONS FOR FAILURE TO PUBLISH

There is great apparent diversity among the members of the Association in strictness of account upon this subject. The replies elicited under this head are as follows:

California: We have no data which enable me to answer. A later letter adds: In a number of cases the thesis has been published, although it has not been formally filed with our librarian, and on this account was reported as unpublished. In at least two cases, the thesis has actually been published. We are taking steps to have all theses deposited with the librarian. In a number of cases I find that publication has been delayed, but will take place ultimately.

Catholic: Remaining dissertations will be published within the present academic year.

Chicago: Excessive faith during the earlier years of the University in the mere promise of candidates to publish. Many of the theses scheduled as "unpublished" have actually been printed, but not in the form prescribed by our regulations, and the presentation copies have not been deposited in the Library. In another considerable number of cases the dissertation has been accepted by a scientific publication and will appear presently. Of the unpublished theses, 23 are of graduates of 1906 and 48 of 1907. The publication of them is guaranteed. The rules now in force are securing better results, and we are making strenuous efforts to secure absolute conformity with the requirements.

Clark: No failures to explain.

Columbia: Up to a few years ago it was possible for students to receive the degree without a dissertation having been filed in the Library, provided a promise was made to publish it. The result was that in several instances delays were experienced, usually owing to financial reasons, and this accounts for the discrepancy between the number of the degrees granted and the number of dissertations published. In accordance with the present regulation, the degree is withheld until the necessary number of copies have been filed in the Library.

Cornell: It is impossible to give any exact reasons which account for failure to publish. It is partly due to cost of publication, to lack of interest, and in some cases when a considerable period of time has elapsed, to a reluctance to make public what seems immature and unsatisfactory to the writer from this later standpoint.

Harvard: The consideration of expense is the reason that has thus far prevented us from requiring the publication of the dissertation, and it is also the cause why a considerable number have never been published.

Johns Hopkins: (1) Expense. (2) Delay on the part of journals and proceedings undertaking to publish. (3) Unwillingness—though this is true in very few cases. (4) One-third of those who have not printed were graduated in 1907: nearly one-half of them in 1906-7.

Leland Stanford Jr.: I can give no reason for the failure of these three to print.

Michigan: I cannot say definitely what reasons have operated to account for the failure of a certain number of these candidates to publish their theses. Probably in part indifference, or a desire later to work over a larger field than that which the thesis covered, or a realization later that the conclusions reached in the thesis were not valuable enough to publish.

Pennsylvania: The reasons which account for the failure to publish all the theses may be stated as follows: Prior to the year 1900-1, there was no requirement for the publication of the thesis. However, a considerable number of theses, some fifty-one, were printed prior to that date. From June, 1901, one hundred and fifteen out of one hundred and sixty-seven have been printed to date. The following figures of the number of degrees granted and those printed since 1901 will show that the rule in general has worked successfully. The theses for the last two or three years remaining unprinted, will probably be printed within a year or two.

| Year | Number Degrees | Number Theses Printed |
|-----------|----------------|-----------------------|
| 1901..... | 25 | 23 |
| 1902..... | 14 | 13 |
| 1903..... | 29 | 28 |
| 1904..... | 18 | 14 |
| 1905..... | 26 | 15 |
| 1906..... | 28 | 12 |
| 1907..... | 27 | 10 |

Princeton: Nothing to explain.

Virginia: Nothing to explain.

Wisconsin: Failure to publish is due mainly to pecuniary reasons and the hope of securing gratuitous publication at some future time. Professor Comstock, director of the Graduate School, adds: Of the 48 unpublished theses, 23 have been accepted during the past two years and it is expected that all of these will be published in the near future. Nine of the unpublished theses have been accepted for publication by the University. The University is at present in the initial stages of organizing a method whereby more prompt publication may confidently be expected in the future.

Yale: It does not follow that because a thesis has not been published at all it is lacking in merit. The lack of available funds for such publication and the lack of a certain interest in the subject are the prime causes of non-publication.

THE DOCTOR'S DISSERTATION AS AN UNSETTLED PROBLEM

So far as this inquiry has gone, the state of opinion on this subject in the universities of the Association is indicated by the following results:

California: No data for answer to the question.

Catholic: Question not answered.

Chicago (A. W. Small): First, The purely administrative problem under our present rules. We have not satisfactorily distributed responsibility for enforcing the publication rules. Heads of departments, recorder, deans, and librarian are connected with the process of insuring publication, and we have not hit upon a satisfactory technique for insuring efficient coöperation. Second, The financial problem of a guarantee fund for publication of theses. Third, A workable principle of selection in case publication of theses were partially endowed.

Clark: Question not answered.

Columbia (Rudolf Tombo, Jr.): As for unsettled problems, the chief one . . . at the present time seems to be the one of expense to the candidate, and it has been suggested that the number of copies to be filed be reduced from 150 to 100, but no definite action has been as yet taken.

Cornell (T. F. Crane): If this means the question of non-publication, I do not think it is a matter which has attracted much attention, or is regarded as an unsettled problem. If the question means the wider question as to the general nature of the writer's dissertation, I regret that I have not time at this late date to give any discussion of the question, and it is one which should properly be considered by the committee on graduate work.

Harvard (George W. Robinson): The chief unsettled general problem in regard to the Doctor's thesis at this university appears to be the matter of publication. A publication fund of sufficient size to make it possible to require, without hardship to the writer, the publication of all Doctors' theses would be greatly welcomed, I have no doubt.

Johns Hopkins: Question not answered.

Leland Stanford Jr. (A. T. Murray): We do not perhaps consider the Doctors' theses an unsettled problem, but we hardly look for absolute uniformity among the various departments. We have a Committee on Graduate Study, which is intended to safeguard the interests of the University, if a given department is lax.

Michigan (Walter Dennison): There are various questions involved here, but perhaps the most important . . . is the question as to its real value as a contribution to the world's knowledge. Many of our professors, and I suppose this is true of other universities also, are inclined to depreciate the value of such publications to anybody else but the one who writes them.

Pennsylvania (Herman V. Ames): There is a general feeling that our requirements for the printing of a Doctor's dissertation in some instances place too great a burden on the candidate. Ordinarily it is not very expensive to print theses on scientific subjects, as usually the thesis itself is comparatively brief, or a medium for publication is found in various scientific journals, but in the case of dissertations involving historical treatment the size of the thesis is often so great as to impose real hardship on the author, by requiring the publication of the same at a time when he is, in most instances, least able to assume the financial burden. It has, therefore, been suggested that power be conferred upon the executive committee of the Graduate School to substitute for the printing of the thesis in its entirety, the printing of an abstract, which should fairly represent the thesis and give publicity to the plan of the work and results of the study. Up to the present time, however, this modification of the rule of publication has not found sufficient support to secure its adoption.

Princeton (A. F. West): This question practically involves all questions relating to the Doctors' degree, because the Doctor's dissertation brings to a focus very clearly the excellences and defects

both of the candidate and of the standards of this University. To pick out merely a few glaringly important matters for mention, I regard the Doctor's dissertation as an "unsettled problem" in American practice in the following respects: A. It too often exhibits merely the patiently wrought results of a large quantity of mediocre work. B. It is too often written under the spur of seeking to find something original. This is apt to result in finding something either unimportant or fictitious. Every dissertation ought, in my judgment, to be on a subject important enough to deserve publication, and should exhibit thoroughly independent scholarly ability. C. Too many theses exhibit merely or mainly power to arrange, classify, and tabulate; too few dissertations show the power to discover, appropriate, and use only what is valuable, and to develop a given subject analytically and constructively. D. Many doctoral dissertations are written in an arid and pedantic style. Being written in an uninteresting manner, they do not attract the interest of even trained scholars. E. In conclusion, I feel that the question of the Doctor's dissertation is a question of quality—the quality of a man's general liberal education—the quality of his subsequent graduate work, and above all his own personal quality as a man of bright, deep, sensible, definite intellectual character.

Virginia (R. H. Dabney): In reply to this question I might write a small dissertation myself, but must confine myself to very brief remarks. I cannot speak for the University as a whole, as its opinion has not been formulated. I myself (and there are some who agree with me) am of the opinion that as "Doctor" means "teacher" the Doctor of Philosophy ought to be a man fitted to be a *professor* first and foremost, rather than an investigator of minutiae and publisher of writings which no one reads. I agree with the views expressed years ago by such men as Mommsen, Bluntschli, and Carl Vogt, that the German dissertation is in most cases a pretentious humbug. The same is true of course of the American article. I have known a vast amount of time to be wasted in the production of dissertations which might have been profitably spent in acquiring that broad and deep acquaintance with the subjects which the authors of these dissertations needed in order to teach them properly. The world would, in my opinion, be better off if nine-tenths of the printed matter now in existence could be consumed in a huge bonfire, and I do not believe in artificially luring men of mediocre ability into the publication of stupid monographs upon wholly uninteresting themes, and in persuading such men that they have been doing "original research." In the main, a man ought not to publish anything until he is so full of it that he feels in danger of exploding unless he can let off steam through the safety valve of print. Hence I personally would favor the abolition of the required dissertation, and leave men to distinguish themselves by their writings when they really have something to say. But, as I suppose such abolition is impossible, I believe that the publication of the dissertation should be required.

Wisconsin (Geo. C. Comstock): The question is too large for a summary answer. To me, the fundamental inquiry is, Does the dissertation as administered furnish an adequate test of the candidate's capacity for independent work? Can a substitute be found that will furnish either a better test or a greater stimulus to the student?

Yale (Andrew W. Phillips): The Graduate Faculty of the university has not formulated any particulars in which it regards the Doctor's dissertation as an unsettled problem.

In summing up this section of the inquiry, it must be confessed that the returns contain no proof of anything that we did not know before. They furnish occasion, however, for

repeating the gist of the whole matter, viz.: If we are so advanced in years and saturated with this world's wisdom that our last word about our Doctor's dissertation is that it was one of our youthful indiscretions, we show that we have passed out of the range of vision in which the facts concerned can be seen in their true light. I frankly doubt if we really do pass that depreciating judgment upon our own theses. We refer merely to those of other young men. In so doing we omit the meaning term in the whole calculation, namely, the revolution of mental and moral attitude which publication of the results of one's first serious investigation marks. The young man discovers for himself that the thing can be done. The men who write books are no longer a superior species. They are merely elect through consecration of the same powers of which he begins to be aware. He enters their ranks feeling some of the sense of responsibility with which we like to believe other men assume holy orders. At the same time he begins to know himself capable of better things, and to resolve that he will achieve them. More than any other factor in the whole process, the *publication* of his work is decisive.

The only reply, except the financial one, that has much effect against this consideration is that Doctor's theses are usually not worth printing. If we admit this contention—and I simply record my dissent, without arguing the case—and if we allow it to lead to the conclusion that publication of Doctor's dissertations need not be required, we use a logic which by parity of reasoning would call for abolition of recitation and quiz and conference, and—most soul-destroying of all—the reading of examination papers, throughout the undergraduate and graduate years. All the labor which the instructor expends upon all these items in his program elicits less new knowledge from students than he might be able to utter in their presence if they sat continually dumb, while he imparted the results of his research. But we reject this estimate of what is desirable. The desideratum is not first and chiefest the exhibition of the greatest bulk of knowledge. It is all-round mental action on the part of the students. With this in mind, even if no absolutely new results ever appeared in Doctors' dissertations, the stimulus of publication would accomplish more than it costs, even if the impecunious student himself defrays the cost. It does more than any other factor in his experience to complete the evolution of a scholar. The test of the whole graduate process is visibly satisfied. The young scholar is set on his feet and started walking alone in pursuit of knowledge.

RELATION OF INSTRUCTORS TO CANDIDATES' DISSERTATIONS

The following circular letter was sent to representative heads of departments or chairmen of groups:

DEAR SIR: For use in a report to be made to the Association of American Universities, will you kindly at your earliest convenience send the facts, for your department or group, bearing on the following question, proposed by the Executive Committee of the Association, viz.: What is your practice with reference to assignment or acceptance of subjects for Doctors' dissertations; and what is the relation of instructors to the work of the candidates in preparing the dissertation?

The number of replies received was as follows:

| | | | | | |
|-----------------|---|-------------------------|---|-------------------|-------|
| California..... | 1 | Cornell..... | 5 | Pennsylvania..... | 5 |
| Catholic..... | 2 | Harvard..... | 9 | Princeton..... | 5 |
| Chicago..... | 7 | Johns Hopkins..... | 8 | Virginia..... | 7 |
| Clark..... | 1 | Leland Stanford Jr..... | 5 | Wisconsin..... | 3 |
| Columbia..... | 2 | Michigan..... | 4 | Yale..... | 1 |
| | | | | | <hr/> |
| | | | | | 65 |

In order to make this material available in evidence, the substance of the replies is given in the writers' own words:

California

(JAMES SUTTON, Recorder of the Faculties)

The candidate selects his subject in conference with the men who are to direct the work. The thesis is based upon the work in the major subject. The candidate is expected to develop his own thesis. It is not expected that his major or his minor subjects or the subject of his thesis shall be selected for him by his instructors.

Catholic

(DR. O'CONNELL, Rector)

(a) The subject must be approved by the professors in the departments in which the candidate has pursued his studies; (b) The dissertation when completed must be submitted to the professors; (c) If the dissertation is accepted, the candidate is allowed to take final (oral and written) examinations.

(EDW. A. PACE, Political Economy)

(a) The professor suggests a number of subjects from which the student selects, generally following the professor's advice. Frequently, there is a tendency on the student's part to attempt the treatment of a subject that is too large; in such cases, the professor advises the student to look over the entire subject and then helps him to narrow it down. (b) The professor aids the student throughout with references to the sources and discussions of methods. (c) The dissertation when completed is submitted to the professors of the departments in which the student has pursued his studies. In some instances, it is also submitted to competent persons outside the university with whom the student has no relations.

Chicago

(J. H. TURTS, Philosophy)

I do not think any statement covering all cases could be made as to the practice in the assignment or acceptance of subjects. Generally at the opening of the second year of graduate work students are advised to have their minds open, in connection with the work in the different courses, for possible subjects for dissertations. In my own classes I aim to make suggestions from time to time of possible subjects. In assigning papers for report it frequently occurs that a student finds

the subject selected for his report capable of further investigation and treatment, and, perhaps, as offering a good subject for a dissertation. As soon as such a possibility occurs to the student it is understood that he will talk it over with the instructors who work in that particular field, and after such consultation will take the matter up with me. I do not assume myself to take the responsibility for subjects in parts of the field in which I do not work specially, but have conferences myself with the instructors in these fields, and an agreement is reached with the student on the basis of mutual discussion. It is very seldom that we "assign" a subject to a student, but we aim to suggest a good many. In the work of preparing the dissertation it is expected that the candidate will frequently consult with the instructor as to bibliography, method of work, plan for the organization of the material, criticism and hypothesis, and interpretation. It is seldom the case that there is the amount of coöperation which results in practically a joint authorship, although in some cases there has to be a great deal of criticism, and this means frequently an entire reconstruction of material before satisfactory results are obtained.

(JOHN M. COULTER, Botany)

The subjects are selected in one of two ways: (1) The subject is determined by the fact that the student has begun work already in some field that is worth cultivating (this predetermination of the subject holds for more than half of the students). (2) The subject is selected in a conference between the student and instructor, the purpose being to fit the research to the interests and training of the student. No subject is ever assigned arbitrarily or without a certain amount of initiative on the part of the student. In preparing a dissertation, by which I understand you mean the presentation of the results of research, the student is left entirely to his own resources. After he has made as complete a presentation as he knows how, he turns over the result to the member of the staff most familiar with the subject. The thesis as written is gone over savagely as to facts and conclusions, and incidentally as to style. The thesis is then returned in mangled form to the student, who goes over the whole thing and prepares a new paper. This second attempt is brought to the head of the department, who depends upon the previous instructor for matters of fact, and who takes the thesis up chiefly from the standpoint of presentation. No one in the staff ever writes a sentence for any student. Another rule, before the paper is regarded as complete, is that the student presents his paper before the Botanical Club, where every member of the staff and every research student has an opportunity to criticize and discuss it. This exercise before the club is a severe one, and if a man runs that gauntlet, he is pretty sure to make his appearance before the larger public in a fairly good coat of armor.

(R. A. MILLIKAN, Physics)

When the student has been in the department long enough to convince the departmental staff of his ability to prosecute research, he is assigned a subject. In perhaps one case out of five, he selects his own subject and merely has it approved by the department. During the progress of his research the student consults freely with the members of the department as to the results which he is obtaining and the difficulties which he is encountering. How completely his work is directed by the head or by some member of the department depends of course wholly upon the student. In some cases our Doctors' theses have possessed marked originality; in other cases they have possessed very little. The grade of the degree is determined very largely by the originality displayed by the

student on the research. Our students spend on an average a year and a half or two years in working out their theses.

(F. F. ABBOTT, Latin)

Students are earnestly advised to pick out their own subjects for Doctors' dissertations, but in practice in the majority of cases, it has been found necessary in our department for an instructor to assign a subject. It is hardly to be expected, I suppose, that comparatively inexperienced investigators shall always be able to find an important subject untouched in a field where scholars have worked so many scores of years. Hence the unfortunate practice mentioned above. After a subject has been selected the student works under the general direction of the instructor to whose specialty the topic is most closely related. The attention which he receives varies according to his needs. Probably the instructor always advises the student about the field to be covered. Usually certain general points and difficult minor points are discussed, and help is given with the bibliography. Not infrequently the first chapter or an outline sketch of the thesis is read and criticized in detail by the instructor mentioned and by another member of the classical faculty who is associated with him for that purpose. Then it is given back to the student with these criticisms to be prepared for a final examination by this committee of two, who, if they accept it, lay it before the other members of the classical faculties for their consideration.

(JULIUS STIEGLITZ, Chemistry)

(1) Subjects in which the four professorial members of the staff are directly interested are accepted for dissertations. The student has absolutely free choice among the four men, who represent four divisions of work to a certain degree, although there is some overlapping of territory. All the work must be done in residence. (2) The instructors direct, often minutely, the laboratory work in which the dissertation is taken and the candidate carries out directions, but able men are given opportunity to make suggestions both as to the method and direction. The dissertation is also written under the personal direction of an instructor.

(JOHN M. MANLY, English)

The policy of the members of the Department of English is to encourage candidates for the higher degrees to find for themselves subjects suitable for dissertations. In some instances candidates have been able to do this without assistance from any instructor, but usually suggestions of some sort have been necessary. Very seldom, however, has an instructor indicated the precise limits of the subject, or the precise mode of treatment. The following may serve as a typical example. In lecturing upon the Elizabethan drama I have for many years been accustomed to call attention to certain evidence showing that the current view concerning the bareness of the stage was inaccurate. Mr. Reynolds, who was in search of a subject, asked me one day if I thought the subject suitable for a doctor's dissertation. I answered "yes," and he chose it. After working in the field for some time, he decided to confine his dissertation to an examination of the stage directions and text of plays from 1550 to 1600, and I approved the limitation for practical reasons. In the course of his work he often asked my opinion upon some specially puzzling question, or inquired if I knew where he could find some desired information, but the particular views developed in his dissertation are in every sense of the word his own—the result of his own examination of the

evidence and his reflections upon it. The experience of other instructors with other students has been of much the same character. We should, I think, hesitate to allow a student to write a dissertation unless he showed some power of initiation.

(ALBION W. SMALL, Sociology)

My first reply when a student in sociology asks me to suggest a subject for his Doctor's thesis is: "You are not yet in the spirit of graduate work unless you feel a 'woe-is-me' until you go to the bottom of some subject." Then I try to discover whether the student has developed more interest in one than another of the five divisions in which the courses offered in our department are grouped. If not, I tell him that he should in the first place decide in which of these groups he would prefer to do his special work. It usually turns out that this preference has already been settled, and I then send him to the member of the department whose division is chosen. If the student selects my field of work I urge him to propose topics which seem to him worth investigating. As a rule, the subjects submitted are too ambitious, but I have never failed to help the student to a subject more of his own choosing than mine, by advising him which of several to select, and how he had better restrict the field at the start. Having tentatively approved a subject so selected, I tell the student to submit to me as soon as convenient a plan of the investigation. When this is done it is usually necessary for me to advise the student to begin on a certain portion of what he has projected, and see what comes of it. The result almost invariably is that in a few weeks he comes to me to see if I would oppose still further restriction of the field. I tell him that this was precisely what I anticipated, and that he need look for no disapproval from me if he finds it necessary to confine himself within even narrower limits. Gradually a problem of reasonable dimensions is proposed, and my work while the research is going on is simply to ask occasional reports of progress, and to point out any flaws that I can discover in the method applied. This is substantially the procedure of all my colleagues in the department.

Clark

(PRESIDENT HALL, per H. C.)

Subjects for the Doctor's theses with us are freely discussed between the head professor in each department and the intending candidate for the degree. The professors usually make a point of having material in the form of literary references and practice apparatus. It may be of tentative studies of their own, so that when a young man is fitted out with a subject there shall be a minimum of time lost. We constantly confer with our students. The dissertation is read usually in piecemeal at the seminary, and discussed very fully by the other students and by the professor, so that it is to that extent a joint work. It is our purpose never to subordinate the interest of the student to that of the professor's research, as is often done in Germany, and partly for this reason we do not usually assign very highly specialized topics, nor those in which there is great risk of securing results. I think most of our professors are ready to contribute to any extent such intellectual property as they may have on the subject to any man's thesis, and, as it were, take their pay in the acknowledgment of help on the part of the student which is generally generous enough. We deprecate the practice of instructors assigning young men work which will be mainly more serviceable to the professor than to the student.

Columbia

The following passage is taken from the *Bulletin of Information* of the Faculties of Political Science, etc., pp. 20-21.

In particular, the choice of a topic for a dissertation should receive the most careful consideration; it should be made neither too early, before the student is well informed upon the general outlines and bearings of his major subject, nor so late as to result in a hurried treatment. Often a topic is suggested by the professor in charge of the subject or by some other instructor; sometimes the student's own reading or experiments will indicate a suitable one; but in every case the approval of the topic rests with the professor in charge of the major subject. The dissertation must be founded on the author's own investigations, and must embody a real contribution to the knowledge of the topic or topics treated in it. No amount of erudition displayed in a dissertation will insure its acceptance if the conditions stated here be not fulfilled. It may be noted that the most promising topics for investigation are often suggested by a combination of subjects lying under different departments or even different faculties. Many of the recognized fields of science are mere clearings, and pioneer work is needed between them. But even where a topic apparently lies entirely in the field of one faculty or in that of one division or department, its investigation often suggests excursions into neighboring territory. In such cases the student should bear in mind that he is entitled to information and counsel, not only from the instructor under whose immediate direction he is prosecuting his researches, nor only from the instructors whose lectures he is attending, but from any instructor in the university; and no serious student will find that such an application is taken as intrusive. In the field of research, instructors and students are colaborers. The immediate direction of the investigation always pertains to a single professor in the department in which the candidate's major subject lies. To this professor the candidate should report from time to time and submit the completed dissertation, preferably in typewritten form, for preliminary judgment. The final acceptance of a dissertation occurs only after its formal defense.

In addition the following individual statements were submitted:

(JOHN W. BURGESS, Political Science)

The subjects for Doctor's dissertations under the Faculty of Political Science are determined on by agreement between the authors and the professors in charge of the major subject. The author has the constant aid and supervision of the professor or professors in charge of his major subject throughout the entire work of composition, and such professor or professors must certify that he or they has or have approved the subject selected and examined the work with sufficient care to recommend the author to be admitted for examination.

(E. D. PERRY, Philosophy)

In the Faculty of Philosophy the assignment or acceptance of subjects for the Doctor's dissertation are entirely matters for the separate departments to settle. The regulations of the University Council prescribe that the acceptance of the subjects and the approval of the dissertation rest with the head of the department in which the major subject is taken, but it is for the department to decide whether this action shall be taken by the head of the department on his own responsibility or as the result of concerted action by the department. In most cases I think there is perfect

agreement among the professors in the department concerning the acceptance of the subject of the dissertation and the approval of the dissertation itself, although such acceptance and approval are signified by the signature of the head of the department on the candidate's application blank.

As to the second point, the relation of the instructors toward the candidates during the process of preparation of the dissertation, it is, I think, the general rule that some one professor is primarily responsible for the guidance of the candidate, and it is understood that the candidate is free to consult not only this professor but others whom he may wish to consult in the preparation of the dissertation. The degree to which advice and criticism are given the candidate must of course vary greatly among the individual professors.

Cornell

(EDW. L. NICHOLS, Physics)

We encourage candidates to select their own thesis subjects but in practice the department has frequently to offer suggestions. We insist on the greatest practicable degree of independence and self-reliance throughout the investigation, but instructors do not refuse advice and guidance to the candidate.

(J. W. JENKS, Political Economy and Politics)

It is the custom in the Departments of Economics, Politics, History, Statistics, etc., for the professor in whose charge the candidate for a Doctor's degree has his major work, to agree with the candidate regarding the subject for his Doctor's dissertation. Usually it is our intention to get a subject which affords a good field for original work, that is adapted to the candidate's previous training, collateral work, etc., and, so far as possible, one that is of especial interest to him. The assistance given is usually largely given by the chairman of the committee, although, of course, the others make suggestions from time to time as opportunity offers. Usually the assistance given is mostly in the way of suggestions as to literature, and occasional conversations with reference to the way the work should progress, the general direction that it is wise for the study to take, etc. As the work progresses and is put into written form, a report is usually made at the graduate seminary, various chapters being read by the candidate, and a brief outline of the whole thesis being submitted at the same time. It is then criticized especially along general lines, such as the method of treatment, the arrangement of the chapters, the form of citations, etc. Before the thesis is finally accepted, it is read with some care by the members of the candidate's committee. At that time usually some citations are verified in order to test the candidate's accuracy in work of that kind, and a pretty thorough criticism is made of the treatment of the subject under discussion. Unless the work is fairly satisfactory, it is handed back to the candidate, with the notice that it will not be accepted until it has been revised in such a way as to make it a scholarly piece of work. It is not particularly uncommon for a thesis to be thrown over for a year, in order to have the candidate learn a really scientific and thorough habit of work. Practically nothing is done for the student excepting in the way of suggestion and criticism. He is compelled to learn to do the work himself.

(GEO. F. ATKINSON, Botany)

In general the subjects are assigned for the Doctors' dissertation in two different ways. First, the student sometimes comes with a subject which he wishes to investigate to be made the basis

for the thesis. If, after consideration, the subject is one which I deem worthy and the facilities are such as to warrant it, the subject is assigned. Usually, however, the candidate does not have a very definite idea as to the special subject he wishes to investigate. His is usually quite clear on the subject he wishes to make his major. In my experience so far I have found that I constantly have a number of subjects which I consider important ones which I think need investigation. I suggest some of these to the candidate, then after a careful consideration one of these is assigned. Again, there are occasions in which the subject for the Doctor's dissertation may not be assigned at once but work is begun in a tentative way covering several lines or features of the major subject. In the course of a few months or within the first year one of these features proves to be the desirable one to investigate, and by this general investigation of the field the candidate is then better prepared to undertake the special investigation of the subject chosen. The relationship of the instructor to the candidate's investigation is advisory. The candidate is encouraged to pursue his investigations independently. After several months to a year of investigation he is usually in a position to carry on the work independently, the relationship of the instructor still being that of advisor and critic.

(L. H. BAILEY, director College of Agriculture)

The practice in the College of Agriculture in regard to Doctors' dissertations is the same as in any other college of Cornell University. The subjects are determined by mutual conference between the candidate and the head of the department in which the subject lies. The Doctor's work is taken with the heads of the departments, who are assistant and full professors. It is our purpose as soon as we can come to it to have every department in charge of a full professor. Instructors and assistants have nothing to do with the work of candidates for the Doctor's degree except as they assist the professor in charge. They have no responsibility for the work.

(W. STRUNK, JR., chairman Committee of English)

The usage of the Department of English of Cornell University regarding Doctors' dissertations is as follows: acceptance of subject lies solely with the chairman of the students' committee. The subject is agreed upon between the student and the chairman of his committee. This often practically amounts to assignment. The aim is to have the student depend as far as possible upon his own efforts in preparing his dissertation, under the general guidance of his chairman, with conferences at frequent intervals.

Harvard

(RALPH BARTON PERRY, chairman Division of Philosophy)

Ordinarily the candidate selects his own subject—but in consultation with the instructor with whom he has taken his most advanced work. If he asks to have a subject assigned him, several are proposed, and he selects from them after talking the matter over. Then the choice is formally approved by the chairman of the division as a whole. In other words, there is no routine in the matter, the student arriving at his choice after talking with his instructors or with anyone who may be able to help him. The chairman will approve the subject if it promises a good scholarly task for which competent guidance is available. It is the general custom for students to prepare their dissertations in connection with one or more of the seminaries. The candidate may in this way read instalments of his thesis before his fellow students and have the benefit of their criticism

as well as the advice of the instructor. Apart from this, the student goes for advice to any instructor who he thinks may help him.

(DAVID G. LYON, Semitics)

In the Semitic Department at Harvard the subject for a Doctor's dissertation is always a matter of agreement between the candidate and the department. It may be suggested by the candidate or by one of his teachers. An acceptable thesis must show an original treatment of a fitting subject, or give evidence of independent research.

In the preparation of his thesis the candidate may consult his instructors freely, but the investigation must be entirely his own.

(J. B. WOODWORTH, Geology)

The practice in the Division of Geology is for candidates for the Doctorate to confer with the professor under whom they will mainly work, with regard to the subject and scope of their thesis. Subjects are not assigned; but a candidate may be advised concerning the suitableness of the problem selected, and subjects or fields of investigation may be suggested if the candidate has not a definite or apparently promising subject in mind. In due time the candidate presents this subject along with a statement of his academic record to the Division Committee for formal acceptance, revision, or rejection. The relation of the instructors to the candidate varies with the instructors. Some one instructor in the division is invariably in close contact with the work of the candidate; this instructor directs, so far as direction may be given, the work of the student; he holds consultations with the candidate and keeps himself informed of the progress of his investigation; but assistance on the part of this or other instructors is understood to be limited to that which helps the candidate to help himself. The candidate may consult various instructors in the division with all freedom. As there is no royal road to learning, so there are no rules laid down or stated in precise terms concerning the preparation of the thesis.

(THEODORE LYMAN, Physics)

In most cases, the subject is approved by some member of the department and the research is carried on under his direction at this laboratory. If work done at some other university is presented as a subject of a thesis, it must be approved by the department as a whole. The candidate writes his own dissertation, but the work is generally read and corrected by the instructor under whom the research has been conducted before the thesis is presented for the inspection of the department.

(JEROME D. GREENE, Modern Languages)

The subjects of Doctors' dissertations have to be satisfactory to the Division Committee; the relation of instructors to the work of a candidate in preparing the dissertation is very friendly and confidential in most cases; sometimes not intimate; always amicable.

(CHARLES H. HASKINS, History)

The inquiry concerning the practice of the Division of History and Political Science of Harvard University in the matter of Doctors' dissertations is not easy to answer, as there is considerable variety in the practice of the different instructors within the division. Generally speaking, I should

say that the subjects for Doctors' dissertations are chosen by the student from a number suggested by the professor with whom he desires to work. Some instructors, however, select a subject carefully with special reference to the student and the aptitude and interests he has shown in his other work. Of course, it frequently happens that Doctors' dissertations grow out of topics assigned for theses or reports in connection with one of the ordinary lecture or seminary courses. The same variety probably prevails with respect to the relations of instructors to the work of the candidate in preparing the dissertation. It is a practice of most of the members of our division to meet their research students for regular weekly conferences. In the collection of material, and in the preliminary work of criticism and interpretation, the student thus receives considerable guidance from the instructor with whom he is working, but the final elaboration of his thesis, its plan and structure, are left to the student himself. There are, however, some instructors who give their students less training and assistance in the preliminary stages of their research. The question of the amount of coöperation which is desirable between students and instructors in the preparation of a Doctor's thesis is not an easy one, and the problem must necessarily vary greatly with different subjects and different teachers.

(THEODORE WILLIAM RICHARDS, Chemistry)

First as regards assignment, if the candidate has no suitable topic in his mind, the professor under whom he elects to work usually suggests a number of different subjects to him, and he makes his own choice. In any case the fitness of the subject is determined by the professor, but no professor or instructor is allowed to give a research course unless the vote of the division as a whole permits this. The subject must always involve an addition to knowledge; mere bibliographical work or comparison of authorities is not accepted. The student is not necessarily restricted to a single subject or even to a single instructor. Secondly, as regards the relation of the instructor to the work of the candidate, the following is the practice: The professor and student confer daily in the laboratory concerning the progress of the work, discussing both the details and general principles. Toward the end of this time the student writes his thesis, embodying the results of the investigation. This literary work must be entirely the student's own. The professor does not see it, or make any suggestions concerning the mode of treatment, either in general or in particulars. On May 1 the thesis is handed to the division, who judge it not only as a piece of chemical work, but also as a logical argument, and may reject it wholly upon the score of English. This has happened more than once during the last ten years. On June 1 the thesis is placed upon the faculty table, and is open to the inspection of any member of the faculty. After the degree has been granted the manuscript is preserved in the College Library. The publication of theses thus produced, while permitted, is discouraged rather than otherwise as they rarely present the subject matter in the form most desirable for permanent record. The results are usually sifted by the professor afterward, and a paper written by him is published under both names. At least two years wholly devoted to research are required to attain the degree, but usually three or four are necessary. Men who employ part of their time in teaching always require more time.

(G. H. PARKER, Biology)

Candidates for the Doctor's degree in Biology may bring their thesis subject from other institutions, may receive them by suggestion from an instructor, or may find them through their own

reading or work. Such subjects must always have the approval of the instructor under whom the work is done and also the approval by vote of the Division of Biology. Students write their own theses, submit them for criticism to the instructor in charge and then rewrite them before they are submitted for examination. In most cases the revision entails much work on the part of the instructor, and as a rule the students value this coöperation highly.

(W. E. BYERLY, Mathematics)

The Department of Mathematics at Harvard takes no formal action until the dissertation is completed. It is then referred to a sub-committee who read and criticize it and recommend its acceptance or rejection. The subject is usually chosen in consultation with some member of the department under whom the candidate has been doing advanced work, and is prepared under his supervision.

Johns Hopkins

(MAURICE BLOOMFIELD, Sanskrit)

Dissertations for the degree of Doctor of Philosophy in Sanskrit, or in Comparative Philology, have invariably originated from the teacher's incidental mention of problems or themes that need to be elucidated beyond the point at which the teacher finds them. The student stores up in his memory one or more of these suggestions and returns with them to the teacher for further clarification and for his assent to one or the other theme. The work of the dissertation, beyond a few general suggestions, is carried on by the student alone. When the dissertation is ready the teacher in reading it is liable to make sharp criticisms, and to call for better elaboration of certain parts, and at times for a considerable amount of recasting. In all cases the dissertation is the student's work.

(PAUL HAUPT, Semitics)

As a rule, the director of the Oriental Seminary suggests the subject for a dissertation, but the candidate may select his own subject. Apart from occasional suggestions or answers to legitimate questions, the candidate is not assisted by the instructors in the preparation of his dissertation.

(B. L. GILDERSLEEVE, Greek)

The subjects for Doctoral dissertations in my department are usually agreed on in conference between the candidates and the professor. The decision depends so much on the personality of the student and his response to the opportunities offered by the different lines of research, that have been opened up to him in the course of instruction, that it would be impossible to reduce the practice of the head of the department to any fixed categories. In like manner the amount of help given depends on the student and the subject. It never amounts to more than suggestion and correction.

(A. MARSHALL ELLIOTT, Romance)

It has never been the custom of this department to assign subjects for dissertations. After a year's work, during which the student's preference becomes marked, a series of subjects is submitted to him in the special line of his interest. He makes a selection of a subject strictly within the limits of his preference and begins at once to collect material on it. As a rule, the student

needs for the beginning no guidance: afterward he receives suggestions as to the remoter sources and rarer bibliography of his subject. When he shall have collected, sifted, and arranged his material, he consults his professor, who discusses with him his classification of the same and criticizes it. The student then works out a small, definite section of this material and submits it to his professor, who passes criticism on his language, mode of presentation, etc. This portion of his work serves as a model for the dissertation, which is eventually reviewed as a whole by the professor. A few students select their own subjects (of course strictly within the line of their preference), with the approval of the professor. After this, consultations are held by special appointment if necessary. Constant practice is carried on in the investigation of short subjects during the whole course of study of the student, so that, when he finally begins his dissertation, the chief suggestion which he needs comes from a wider reading and broader acquaintance with the field than those which he possesses. The object of this procedure is to teach the student independence of judgment and a critical self-reliance than the handling of his material.

(HENRY WOOD, German)

In the group of studies at this university designated as German, candidates for the degree of Ph.D. are urged to select subjects for dissertations two years or more before the final examination for the degree. The theme is fixed upon in conference between the candidate and his chief instructor, the latter, as a rule, suggesting the actual subject, but never without a careful canvass of the student's abilities and tendencies, and always with his unqualified assent. Not infrequently the candidate makes suggestions which are greatly helpful in fashioning the theme, and occasionally he is able to suggest a subject of his own. After a series of preliminary conferences, more or less prolonged, the instructor merges his office as private friend in that of private counselor and critic. The results of the candidate's work are presented, in successive chapters, at the stated meetings of the Germanic Society, a university organization. The resulting discussion, in which both the instructors and students in German take part, affords the candidate a welcome opportunity for learning how well he is succeeding, and where he should modify his plans, rearrange his material, or alter the form of presentation. Where students are working on their subjects *in absentia*, at the Royal Library in Berlin, or elsewhere, this method of procedure is altered to suit the circumstances, the conferences in that case usually taking place abroad during the summer.

(J. M. VINCENT, History)

As a rule the students ask for suggestions for a subject of research. Only occasionally has a man advanced so far that he offers a topic with confidence. In recommending the subject the individual capacity of the student for that theme is taken into consideration. His accessibility to the materials is also weighed, because nearly all historical subjects require some part of the research to be done outside of Baltimore. The choice of a European subject may depend on the ability of the man to visit foreign archives. As the instructors usually have a variety of subjects in mind the student in reality chooses the topic among suggestions. The researches are not made by order, but, wherever the suggestion originates, the subject must be acceptable to the instructor responsible for that field. During the progress of the research the instructors stand ready to give advice as to methods of procedure. Reports of progress are expected from time to time, either in seminary papers or in private consultation. Students are also confronted with the fact that their

work must be printed and therefore subject to the criticism of the learned world. The final acceptance of the dissertation lies with the Board of University Studies, but before the work is submitted to that body the responsible instructor in that field has assured himself that valuable results have been obtained and that the study is presented in good form. Owing to the student habit of seeking advice everywhere, it is likely that two or three professors will be equally aware of the state of the dissertation.

(JAMES W. BRIGHT, English)

How subjects for dissertations are assigned cannot be described in terms of a rigid formula. The teacher of graduate students, conducting his courses so as to lead his students to apprehend a department of knowledge in all its aspects, will take every occasion to point out problems that remain to be investigated. He is thus suggesting possible subjects for dissertations, in season and out of season, and the alert student will often be stimulated in this way to select a subject for himself. Conference with his teacher will naturally follow, and a decision will often be made. Another student, less confident of his possibilities, will require to be reminded of his potential fitness to undertake one or another of the subjects suggested. It will also be found that occasionally a student has in some other way become interested in a suitable subject. In such a case the teacher will be consulted as to the wisdom of undertaking it. Or, to instance one more of the many possibilities, the teacher will often have a subject on hand, awaiting the advent of the right student to try it. The assignment of these subjects is through an organic process, not a mechanical one; and no discussion of this process can possibly be profitable, except in the way of admonition not to expect vital and well-chosen subjects to be suggested by a teacher who does not maintain vital relations to his department of knowledge. In like manner, the guidance of a student in the preparation of his dissertation is valid only when it is kept on the level of true university dignity. This indefinite expression is meant to exclude that sort of help on the part of the teacher that in its character demonstrates the student's unfitness to undertake a piece of independent work. Counsel and direction may be required in large measure, according to the nature of the subject; and the student should be encouraged to consult his teacher at any point in his investigation. In short, if the twofold selection has been properly made, that of the subject and the man, the matter of guidance becomes organic and dignified, and further formulation of how to assist a student in the preparation of his dissertation becomes at once both fruitless and unnecessary.

(JOSEPH S. AMES, Physics)

(1) It is the distinct wish of the director that each student should suggest his own subject; in which case, if it is acceptable, he is encouraged to proceed with his work. Unfortunately only a small proportion of students ever do this. (2) In the majority of cases some line of research is suggested either by the director or by some one of the instructors, and that work is carried to completion by the student. (3) In a limited number of cases a student undertakes a piece of work which possibly forms part of a more extended research by some professor of the institution, and is allowed to offer this for his dissertation. This practice, however, is not encouraged. The principle which guides the relation of the instructors to the work of the candidate in preparing the dissertation, is a belief that the object of such a research on the part of a student is to develop in him originality of method, independence, and critical ability. To this end as little assistance as is possible is rendered him, and he is encouraged in every way to develop his own resources.

Leland Stanford Jr.

(H. R. FAIRCLOUGH, Latin)

In the few cases of candidates whom we have had for the Ph.D. degree, the subjects of dissertations have usually been suggested by the instructor in view of the candidates' earlier work. Beyond this, the instructor has had little to do with the candidates' actual work of preparing the dissertations. Progress has been reported from time to time and suggestions made as to further work.

(J. M. STILLMAN, Chemistry)

Our present practice is that the candidate chooses the direction of one of the professors of the department, and the work on the dissertation is carried out under his direction and to his satisfaction. The subject is either suggested by the professor or accepted by him. It is expected that the work shall be carried out at least in part in residence, although sometimes the nature of the subject naturally requires that a portion shall be done *in absentia*. When the manuscript is finally acceptable to the professor under whose direction it was carried on, it is submitted for examination to the other members of the department faculty and passed upon by their formal vote before being submitted to the committee on graduate study, who, on the basis of the dissertation and the examination, as well as on recommendation of the department faculty, recommend the candidate to the Council for the degree.

(MAX FARRAND, History)

.It is the practice of the Department of History to allow a student and the instructor, in the department with whom the major work is to be done, to arrange a subject for a Doctor's thesis, which is acceptable to both student and instructor. That instructor is expected to keep in touch with the work which the student is doing, and with advice and direction prevent the student from dissipating his energies, but yet without in any way interfering with the initiative of the candidate. That is, the candidate must do original work and the instructor shall act as nothing more than his adviser.

(DOUGLAS H. CAMPBELL, Botany)

The practice of the Department of Botany here is to leave the choice of subject as far as possible to the candidate, although in practice there has usually been a consultation with the instructors in the department, in regard to this choice. After the subject of the dissertation has been agreed upon, the work is left, as far as may be, in the hands of the candidate, who is expected, however, to report frequently in order that the work may be checked and criticized. We endeavor to make the work the student's own, so far as is compatible with safeguarding the soundness of the results.

(JOHN E. MATZKE, Romance)

I must preface my answer by the statement that graduate work with us is practically undeveloped, and that my opinion is therefore entirely personal and theoretical. Your question is a double one. As to "the assignment or acceptance of subjects for Doctor's dissertations" I would say that the usual habit as you know is that of assignment. It has always seemed to me that this practice is open to much criticism. The dissertation in consequence is looked upon as a task to be accomplished by the candidate, and not as evidence on the part of the candidate of his judgment

in scientific matters. In my opinion it would be desirable if the candidate were responsible for his subject, and if the department were to *accept* rather than to *assign*. I am questioning whether the lack of productiveness on the part of Doctors is not due to a certain extent to the fact that college methods of arranging tasks are carried into the graduate school. My answer to your second question, "the relation of the instructor to the work of the candidate in preparing the dissertation" is along the same lines. If the work is done under the direct supervision of the instructor, the quantity of independent research and originality is apt to suffer. It would be well, therefore, if the candidate, after he has been obliged to find a workable and promising subject, were further held to work it out by himself, and in his own way, thus giving evidence of insight into his field as well as of mastery of its methods.

The University of Michigan

(F. M. TAYLOR, Political Economy)

(a) As to subject, we of course consult the student's inclinations, previous studies, etc.; still in considerable measure we dictate on this point.

(b) We have little relation to the work of the candidate in preparing his dissertation. This probably does not result from a conviction that it is the proper course, but rather from the pressure of other work, unfitness for this sort of work, lack of special study along the line involved, etc. Personally I feel much self-condemnation for this neglect, but hardly expect to amend.

(MARTIN L. D'OCÉ, Greek)

It is the practice of the Classical Department to submit to the candidate a list of subjects from which he may choose, it being understood that the choice shall be in relation to the study which he has chosen for his major. For example, if his major is Greek, his dissertation shall be on a Greek subject. It sometimes happens that the candidate has himself found a subject for investigation which may be approved by the Committee in charge of his work. The candidate receives aid from his instructors in getting the bibliography of his subject and collecting his material. He submits in due time an outline of his dissertation which his instructors will discuss with him and modify or approve, or reject, as the case may require. Further aid than this the candidate cannot expect, except occasional conferences on points that arise in the course of his investigation. The first draft of the completed dissertation is read by all the members of the committee in charge of his work, and by any others the committee may desire to have pass judgment. In this reading corrections and criticisms may be made. But this reading determines whether the dissertation is to be accepted as satisfactory or not. If accepted, it is put into final form and finished and prepared for publication. This final finish is sometimes not given to it until after the examination and the conferring of the degree. But the diploma is not given until the dissertation is presented in its finished form.

(FRANCIS W. KELSEY, Latin)

In the classical department we have not formulated fixed rules. We encourage the division of thesis work among the professors, however, in order that no one man be too much burdened by the number of such pieces of work which he may have in hand at one time. It is customary to discuss in department meetings both the thesis subjects suggested and their adaptation to the

powers of the students for whom they are proposed. There is a great difference among instructors in their aptitude in directing work of this kind, and the tendency is to leave it more and more to the men who are best able to handle it.

(C. H. VAN TYNE, History)

I urge the student to select a number of themes in which he is interested, and then I indicate the one which seems most profitable. Sometimes I suggest by handing him a list of things I know ought to be worked out, and when he has selected several, we find out which falls in best with our library facilities. As to acceptance, I think there are too many elements involved to give any brief answer. The chief desideratum is originality of method and result. As to my relation to the student's work, I try to have him do the work, not me. I suggest sources, methods of work, and phases which need emphasis.

University of Pennsylvania

(WILLIAM A. LAMBERTON, Greek)

Subjects for dissertations are (preferably) chosen by the student and approved by the instructors; often, however, they are, after consultation, recommended (several being suggested) by the instructor, care being taken that the subjects shall be such as to be profitable and agreeable to the student. The instructors advise, and when necessary guide; their office is critical, not contributory.

(E. G. CONKLIN, Zoölogy)

Where students come to me with the subject already selected I approve it, if possible; where I am asked to make the selection I consult so far as possible the wishes and needs of the student. All the instructors in the department are at liberty to confer with the students regarding their work, but the assignment of topics and the acceptance of the finished paper is in the hands of the head of the department.

(A. W. GOODSPEED, Physics)

Our candidates for the Doctor's degree usually suggest subjects for their dissertations. These subjects are gone over and discussed by the members of the staff, and one selected which seems to be mutually satisfactory. The candidate does all the actual work of the thesis; however, the assistance of an instructor is frequently required. Our theses here are usually quite independent of any work that the instructor may be doing at the same time.

(EDGAR F. SMITH, Chemistry)

It is our custom in Chemistry for the head of the Department of Chemistry to assign the subject for the Doctoral dissertation, and to have very close supervision of the work during its prosecution. The student is permitted to publish it as a separate pamphlet over his own name, making mention somewhere that it was suggested and carried out under the direction of _____.

(EDWIN W. CRAWLEY, Mathematics)

In the Department of Mathematics, graduate students choose the subjects of their theses, so far as that may be possible. As a general rule, this means that the students choose the branch of mathematics in which they desire to write their theses, and then select the particular subject in that

field in consultation with the member of the staff whose work happens to be in the same subject. Any assistance which may be rendered by the instructor during the progress of the work is confined to suggestions and guidance.

Princeton University

(ALEXANDER T. ORMOND, Philosophy)

The conditions are practically the same in all the departments. The minimum limit within which the degree can be taken is two years, though ordinarily more time is found to be necessary. The candidate works under the direction of the department or the professor in whose field his major has been taken. He chooses as the subject of his thesis, with the advice of the professor, a topic lying in the line of his major (this as a rule). He must begin the work of his thesis in the first year of his study and as early as possible. The greater part of his work is done outside of the regular courses of instruction and the function of the department or professor is mainly advisory. We expect the thesis to embody the results of genuine scholarly research or scientific investigation. Most of the failures to obtain the degree occur in connection with the thesis. The thesis must be accepted before the candidate is admitted to the final examinations.

(T. W. HUNT, English)

(1) The subjects are assigned by the professor conducting the graduate studies of the respective candidates for the degree. At times, and indeed, generally, two or more subjects are proposed among which the candidate may choose, reference always being made to the candidate's expressed preference and his aptitudes. (2) As to the "relation of the instructor to the work of the candidate in preparing the dissertation" I may add: If you use the term "instructor" technically as distinct from "professor," they have no part in such work. If the term is read in a wide sense, then the relation is one of advice and helpful suggestion, assigning and indicating collateral reading, method of treatment, if desired, and stating what is primary and what secondary in the discussion.

(H. B. FINE, Mathematics)

The number of graduate students in the Department of Mathematics is small, and a candidate for the Doctor's degree does not present himself oftener than, perhaps, every other year. Under such circumstances, it is possibly too much to say that we have a *practice* with reference to the assignment or acceptance of subjects for Doctor's dissertations. I should say, however, that the subjects have in most cases been assigned, and that the candidate has been under the direction of his professor during the preparation of his dissertation.

(J. H. WESTCOTT, Classics)

It is our custom to require that every subject presented for a Doctor's dissertation shall first be approved by the professor or professors having special charge of the candidate's work. Sometimes the candidate suggests his own subject, at other times the subject is suggested to him. The relation of the professor to the work of the candidate in preparing the dissertation is one of constant consultation and criticism.

(H. A. GARFIELD, Political Science)

The practice varies considerably in detail, but in a general way the following course is pursued. The special topic to be treated is selected by conference between the candidate and the instructor. The subject selected must always have the approval of the instructor, but the candidate's preferences are consulted. One might say that the candidate is given liberty of choice, subject to the right of intervention on the part of the instructor. Usually after the topic is assigned, the candidate submits for criticism a bibliography of the subject. An outline of the thesis is then prepared, and often critically examined by the instructors. Thereafter and during the course of investigation frequent conferences are held. The instructor holds himself at all times ready to lend assistance to the candidate through discussion of the several phases of the subject; but care is taken to save to the candidate the invaluable experience of working out the solution for himself in his own way. The instructor keeps him away from the rocks and shoals; but otherwise allows the candidate to navigate for himself.

University of Virginia

(CHARLES W. KENT, Literature)

Personally my practice with reference to assigning Doctor's dissertations is to confer frankly and carefully with the student and to select as far as possible a subject in which he is interested and therefore, one to which he will give more than mere task work. A large number of my subjects of recent date have had to do with the rich and unexploited field of southern literature. As to the acceptance of these dissertations, I distinctly require that they shall be worthy of publication: a dissertation that is not worth printing, is hardly worth accepting in my department. I am, therefore, distinctly in favor of having these dissertations published. As to the relation of the instructor to the work of the candidate in preparing the dissertation, I beg to say that my relation with my graduate students is as a rule close and personal. I have, therefore, frequent opportunity to show my interest in their work, to give hints, make suggestions, and, above all, extend encouragement. Beyond this, my aid rarely goes, as I do not wish the student to depend upon me, or to diminish the originality of his own research work.

(RICHARD H. WILSON, Romance)

I find that I am obliged to assign a subject to the candidate and continually *aid* him (not merely guide him) in preparing his dissertation.

(ALBERT H. TUTTLE, Biology)

I never assign a subject. I have occasionally suggested subjects for consideration, but I prefer to have selection made by the candidate as evidence of his familiarity with the present state of our knowledge in the field in which he is working. I should refuse to approve a subject not belonging within the special field in which the candidate has been doing his major work, even though represented in one of his minors; or any subject that did not appear to me to be of enough significance to merit several months' serious work. I require all work upon the dissertations to be done independently, as I regard this as the supreme test of the candidate's ability to do original work.

(JOHN MALLET, Chemistry)

The candidate has been at the outset told that it is better for him to select his subject without any suggestion from me. If, however, he is unable to make such selection, I have named to him several subjects, and told him, after reading about them, to choose one of them for investigation. Any improper choice on his part is open to rejection. His work must be independent, but the widest range of reading is permitted and encouraged, and there is no objection to his talking with me as to minor details.

University of Wisconsin

(M. S. SLAUGHTER, Latin)

(a) The subject is *usually* assigned by the instructor, though not always. (b) The relation of the instructor to the work of the candidate is that of (1) adviser, (2) critic. After the first reading of the dissertation, definite suggestions may be made and the work insisted upon, but the dissertation is considered distinctly the work of the student, and he must assume all responsibility for it.

(L. KAHLINBERG, Chemistry)

In the chemical department of the University of Wisconsin the professor under whom the candidate for the Doctorate works as a rule suggests the subject for the dissertation, though this is always done after ascertaining the preparation and inclinations of the candidate. At times the candidate works on a subject of his own choice, and this is on the whole to be preferred. In any case, when the professor suggests the subject, several subjects are suggested to the student, who makes a selection from those mentioned. In most cases the students come to the professor and request that he suggest the subject. After the subject has been chosen, the student works up the literature bearing upon it under the guidance of the professor, but then proceeds with the experimental work also under the direction of the professor. While thus guided by the professor, the student must in the course of the preparation of his dissertation show that he has originality and resourcefulness in attacking the problem, and sufficient maturity of mind to bring the work to proper culmination, before it can be finally accepted. In general the dissertation is finally published under the candidate's name, who makes the statement that the problem was suggested by professor so and so and worked out under his direction.

(RICHARD T. ELY, Economics)

I hardly know what can be said, except that we treat each case as it arises. The Director of the Graduate School sends men in Economics to me as head of the department. I talk with the graduate students about the work they propose to do. Naturally, this includes the thesis. If a thesis subject is mentioned which obviously is not suitable, I explain the reasons why the subject is not a desirable one. I may myself mention another subject. I keep a long list of subjects, jotting them down as they occur to me. If I am lecturing on the History of Economic Thought, for example, certain topics will occur to me which would be suitable for Doctor's dissertations. Very likely the student will think about the matter and will come to me again within a few weeks. At that time he may mention a satisfactory subject, or one which appears to me to be satisfactory; let us say it is in the field of Money and Banking. If any suggestions occur to me in regard to it, I will mention

them, and then send the student to Professor Scott as the one who is specializing in that field. Sometimes it will happen that a subject will appear to be satisfactory but will not "pan out." No one, I take it, can tell exactly how a subject is going to turn out until one has gone to work upon it. If the subject does not turn out to be satisfactory, either because it is not a good one or because it is unsuitable to the student, it only remains to take another subject. After the thesis has been completed, it is approved first by the one under whom it was written, and then by the committee appointed to examine it. It does not seem to me desirable to formulate any precise rules and regulations, but to treat each case as it arises in a simple, common-sense way.

Yale

(ANDREW W. PHILLIPS, Dean)

It is customary for the candidate, in the selection of his topic for a thesis, to receive the advice or approval of the professor at the head of the department of study in which the thesis is written. The relation of the instructor to the work of the candidate in preparing the dissertation is simply advisory.

Reviewing the material under this head, I am obliged to point out that, although sixty-five answers are a relatively unusual number in response to an inquiry of this kind, it requires but a glance to discover that they are far from enough to support a generalization of practices in all the departments of these universities. At first reading, they seemed to indicate much more uniformity than I am able to infer after partial analysis. I find no proof that men in the same fields of knowledge are agreed about the desirability or undesirability of *assigning* subjects as compared with *accepting* them. By reading these statements, my own presumption that nothing of great weight could be said on the side of assigned subjects, has been considerably disturbed. I am led to conclude rather that there may be departments, and possibly there may be more or less temporary circumstances in the conditions of research in all departments in which assignments of subjects may be wise. The one generalization in this connection which seems to me safe, is that there should be an attempt among workers in the same subject to reach a consensus about advisability of the alternatives under present conditions of knowledge in each field.

In the second place, the language used, together with such observations as I have been able to make, seems to warrant the inference that instructors, who on the whole prefer that subjects should be chosen by candidates, might do much more than they claim to do, in the way of stimulating their students to such choice.

In the third place, the most positive inference which the evidence justifies as to existing conditions is that, regardless of the way in which the subject is chosen, the importance which we assign in practice to the preparation of the dissertation, as a test of the candidate's mental initiative, is decidedly gratifying.

Finally, this survey has confirmed a judgment which is between the lines of much that has been quoted above, and which Professor West has most forcibly stated. It amounts to the truism that graduate schools cannot do much to supply the deficiencies of previous

education. Whether a man can be stimulated to productive research, depends more upon what he has done or left undone before entering the graduate school than upon all the influences that can be focalized upon him later.

Without dwelling further upon generalities, I venture to suggest a single particular in which agreement by this Association would presently secure better equipped graduate students.

Theoretically, all the members of this Association require graduate students to make use of French and German. In certain subjects other languages are required as alternatives or additions. Not more than three of our number have a rule that test of ability to use the required languages shall occur one academic year before the final examination for the Doctor's degree. I suspect that accurate statistics of the actual ratio of use which our students make of those languages would convict us of consenting to call a large number of men "Doctor," whose acquaintance with the apparatus of their profession, outside of their own language, is not sufficient to insure, to any great extent, their use of foreign sources after they have received their diplomas. At all events, if we are right that reading knowledge of certain languages is a part of the necessary equipment for the kind of research which Doctors of Philosophy are trained to do, there is a serious anomaly in granting the degree to students who have used that part of their equipment during only the smaller portion of their graduate years.

As an item, therefore, making for higher standards of graduate work, and incidentally to insure more valuable Doctor's dissertations, I suggest, first, that this Association take into consideration the feasibility of fixing a date after which, by agreement between the members of the Association, no candidate will be admitted to examination for the Doctor's degree unless one year of his graduate residence shall have been subsequent to official acceptance of his knowledge of French and German; and second, that a later date be considered after which two years of graduate residence would be required subsequent to successful tests in those languages.

Of course the final form of this proposal, if it were adopted, would provide for certain exceptions and substitutions, and other equally desirable modifications of our requirements might be named. On the whole, I know of none that seem more timely, or that would improve graduate work in an equal number of subjects.

DISCUSSION OF THE DOCTOR'S DISSERTATION

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. D'OOGE: I would like to inquire whether any of the universities represented in this Association grades its Doctor of Philosophy degrees and dissertations. I make that inquiry from a desire to keep a high standard for the Doctor's degree. Is not there some danger if we make the degree too easily attainable that it will lose its force and value? I have feared that might be the case, that we ought to have more men who are satisfied with attaining the Master's degree

and who should not be encouraged to look for anything higher. I personally feel very strongly in favor of publication of the Doctors' theses as a wholesome stimulus to the highest and best effort. While it is perfectly true that many of the theses are not in themselves valuable as publications, the question is after all what is the object of the Doctor's thesis? Is it not quite as much for the sake of the candidate's personal growth and intellectual development as for results that may be supposed to be contributions to knowledge?

MR. CARPENTER: With regard to this matter of modern language requirements, it should be said that Columbia requires a reading knowledge of French and German from every candidate for the degree of Doctor of Philosophy which must be satisfied at least one academic year before the candidate comes up for the final examination. This is not a paper requirement, but is real. The candidate in the faculty of philosophy must appear before the representatives of the French and German departments and in the other faculties before someone appointed for the purpose, but the requirement is inevitably made. Preferably, in every case, the candidate is examined upon the kind of French and German that has been used in his particular investigations.

Another matter reported upon in Dean Small's paper was the discrepancy between degrees bestowed and dissertations printed. At Columbia University, all of these without exception go back to conditions that no longer exist.

There was in vogue at one time the practice of bestowing the degree after examination, but withholding the diploma until printed copies of the dissertation had been duly submitted. We found, however, in this practice of bestowing the degree in advance of the presentation of the printed dissertation that some candidates went out who, since they had the degree, did not care whether they had a diploma or not. We have never been able to get the dissertation from some of these students from whom we withheld the diploma. Perhaps the reason for the default is pecuniary since it costs a good deal to print a dissertation. We find at Columbia that our Doctors' dissertations are too large. There is a growing tendency to make them into big volumes. In late years we have tried to induce the candidate to submit a smaller amount, but it seems to be in some departments of investigation, and in literary subjects, particularly, a very difficult matter to make a proper presentation of a new subject within a small compass. There is a proposition before the council of the university at the present time to accept for publication a part of the dissertation. We have never done that, but we are, I am sure, to meet precisely the same difficulty that has been described to exist at Johns Hopkins from the standpoint of the candidate. He looks at the matter of printing an excerpt with a very doubtful eye. He desires after his long work has been finished to have it all printed, although it may necessitate a great increase in the cost of publication.

MR. CROSS: Two or three things have been brought up in which Yale really or apparently differs from other universities. Yale holds strictly to French and German as a preliminary requirement for the Doctorate. The examination in these subjects must be taken two years in advance of the degree.

In regard to the period of study, it is really the same with us as with others, though the period is not rigidly fixed. It is very rare for a man to take his Doctor's degree without three years of study, and often four years are necessary. Occasionally a very mature student has obtained his degree in two years.

In regard to printing, it has never been a requirement at Yale that the theses should be printed, though our students are encouraged to print them. What has stood in the way of this requirement

has been, I suppose, largely the expense. In literary and historical subjects it often happens that the expense is too large, being sometimes as high as \$250 or \$300. By way of encouragement to print, we appropriate \$50 toward the expense. Eventually most of our theses, in whole or in part, do get into print; very often parts appear in various journals. Several of the best books that have appeared at Yale in the last few years originally started from the Doctor's dissertation.

MR. PAGE: The plan of the institutions which are members of this Association giving out some time during the winter a little leaflet setting forth the titles of dissertations that are being prepared in the various institutions would be exceedingly inspiring. I hope that will be considered.

As to our practice in Virginia, we believe that we ought to catch our Doctors young, but we encourage them to stay with us a long time. We have been so fortunate as to be able to institute a system of teaching fellowships by means of which we can keep our young men from four to six years instead of two or three. It is practically impossible for us to take a half-baked man who has just obtained his Bachelor's degree and put him in position in two years (unless there is something unusual about him) to begin research, and do something by the end of three years that is worth while. Few men have received the degree of Doctor of Philosophy at Virginia in less than four years. We require three hours of work a week of the teaching fellows, in the instruction of undergraduates. If a candidate fails to get the Ph.D. degree under this system he will, at all events, be trained to be a good teacher, and can generally get the degree of Master of Arts.

MR. JUDSON: A student may come very highly trained from some college and the subject elected may be one in which he already has considerable proficiency; another student has not that training, and there is a great difference between them. One student might in two years cover all the work necessary for the examination, another might require more time. This is a practical matter, and I am speaking of this not to express an opinion but am wondering how far the experience of other institutions goes in this matter and how far they may find that the time element is necessary. I don't see how we can lay down a hard-and-fast rule, although we do require three years.

As to grading degrees, that is done in the University of Chicago, and those who attain the highest degree are few. Our theory in all departments is that for such grade the presumption is always against the candidate. He must compel the faculty to give him the highest degree, and in that way we can estimate the difference between him and the ordinary student. Of course the one who takes a lower grade may turn out to be stronger. At the same time the other at that point has done what others have not and proved himself capable of high work, and the same qualities it is presumed would enable him to do well later.

MR. SMALL (in reply to a question): In not more than one-third of the universities is the candidate compelled to appear before the faculty and defend his thesis.

MR. GARFIELD: It is our custom to require that sort of defense whenever the subject lends itself to controversy; we find it of the utmost value in determining the quality of a thesis. Not only does the candidate appreciate that he must present in satisfactory form his argument and the result of his investigations, but he has always before him the stimulating knowledge, that he must appear before several members of the faculty appointed for the purpose—the professor having in charge his major and two others supervising his minor courses—and be subjected to a rigid cross-examination, and that he must defend his thesis successfully. We have found this, as I say, an element of the utmost value in determining the fitness of a candidate for the Doctor's degree.

As to printing, Princeton requires the publication of all theses. A value not to be overlooked

is the effect of this requirement upon the members of the faculty charged with passing upon and accepting the theses. The knowledge that through publication the quality of the work done is to be subjected to the scrutiny of the academic world, makes for a standard of excellence above that which otherwise might be required. No university is willing to be known to sanction half-done, ill-digested work. I venture to speak with assurance upon this point because of my experience in the practice of law. The preparation of briefs by law clerks, under the supervision of members of a law firm, is fairly to be compared with the thesis work of graduate students. Cases are often submitted to the courts on briefs without argument; but whether with or without argument the printed brief goes far toward making or marring the reputation of a firm. In large offices the work of digging out the law and framing briefs must of necessity be left to young men composing the law clerk force. The member of the firm having the matter in charge lays the case before a clerk, states the principles of law which he believes are applicable, and leaves to the clerk the detail of research and arrangement of points, consulting with him from time to time as the work proceeds. The enunciation of the principles involved and the work of supervision are more carefully done because of the certainty that a court of skilled jurists will read the briefs and pass upon the merits.

MR. SCHURMAN: I was about to call attention to the fact that we have with us the president of the Carnegie Foundation who has voice and seat in this Association. It will scarcely be practicable to continue consideration of the subject before us any longer, but we should like to hear something from the president of the Carnegie Foundation. Yesterday we appointed him on a committee to assist in doing a very small piece of work which he can easily throw off, standardizing the colleges of the United States! Before I make some formal announcements, I should like to present to you President Pritchett, who will, I hope, say a few words to us.

MR. PRITCHETT: Perhaps there is no word I can say other than to thank you for the courtesy and high honor you have done both me and the institution I represent in allowing me to become a member of this body. I was under the impression, until your chairman informed me differently, that I was to be a sort of honorary member along with my colleagues of the Carnegie Institution, from whom no actual duties were to be expected or on whom no responsibility would rest, and would be able to sit here and drink in wisdom without the uncomfortable thought that we were also to share in the solution of these problems.

It is a part of all of our endeavor to try within the next ten years to bring forward what it seems to me are such conceptions of the relations between the different parts of our educational machinery as may tend toward good work, scholarly development, and the strengthening of the institutions in general. In attempting to aid in this the Carnegie Foundation is ready to do anything which may seem to be within its province.

APPENDIX I

REPORT OF THE SPECIAL COMMITTEE ON AIM AND SCOPE OF THE ASSOCIATION

The Special Committee on Aim and Scope appointed by the vote of the Association of American Universities at the Eighth Conference held at Harvard University in November, 1906, having considered the matter referred to it, submits herewith the following report and recommendations:

In the discussion which issued in the appointment of the committee two modes of enlarging the aim and scope of the Association were involved. One concerned the extension beyond the limits of the graduate school of the range of topics which might properly be considered by the Association. This question was, however, made the subject of a special report to the Association by the Executive Committee of the Fourth Annual Conference held in December, 1902. The gist of its report is contained in the following paragraph, which not only represented the unanimous conclusion of the committee, but was unanimously adopted by the Association itself. →

It is thought desirable to include within the scope of the discussions of the Association all those questions and problems which arise in organizing really advanced instruction in the various departments of university life. It is impossible to draw a distinction between studies which are non-professional and those which are professional in their character; because in our modern institution much of the so-called non-professional work of the graduate department is intended as a preparation for the calling of the teacher, and much of the work of the professional schools is occupied with actual research. The problems of the different departments are so connected and interwoven that they have to be treated together in the universities themselves; and it seems desirable that a body like the Association should treat them in the same way.

Your committee has, therefore, confined its attention almost exclusively to the second question which concerns the policy to be adopted with regard to increasing the membership of the Association.

At various times in the past institutions have applied for membership and have been refused. At the last Conference of the Association the opinion was expressed by several delegates that the Association could not hold to the narrow definition of its purpose, as originally conceived, and retain its vitality and usefulness. And they expressed the view that an extension of its membership was both desirable and necessary. The problem devolving upon this committee is the determination of suitable conditions of eligibility to be applied in the admission of new members. The task is nothing less than the finding of criteria for the standardizing of American universities.

Your committee has given a good deal of consideration to the problem, in which it has been materially aided by statistics and other information furnished by the Carnegie Foundation for the Advancement of Teaching, to which it desires to express its deep indebtedness. It has had before it tables concerning American universities with entries showing the number of members of their faculty and teaching staff, the amount of their endowment, their annual income, the requirements for admission to their undergraduate colleges and their professional schools, the number of students registered in their different courses, the enrolment in their graduate schools, and the maximum, minimum, and average salaries of their professors and assistant professors.

Of all the matters considered, the educational standards which any university maintains are in the estimation of your committee the most important. Hitherto this Association has made

the existence of a strong graduate department the sole condition of membership. Your committee believes that if the Association is to undertake—as it thinks it should undertake—the standardization of American universities, another criterion should also be enforced. The policy contemplated has to do with the conditions of admission to professional courses. Your committee is of the opinion that the best American universities will in the future rest their professional courses on a basis of college work which shall range from one to four years, and that the professional student will spend at least five or six years in study from the day he matriculates in the college to the day he receives his professional degree. Your committee accordingly recommends that the Association adopt as a second criterion for membership the requirement of one or more years of college work as a prerequisite for admission to professional courses, the combination being so arranged that no professional degree shall be given until the satisfactory completion of a least five years of study.

The ideal of your committee is the combination of this requirement with the present requirement of a strong graduate school as a condition for membership in this Association. But it recognizes that a strict enforcement of *both* requirements might work substantial hardship at the present time. Nevertheless it thinks that in universities which have professional schools and a graduate department it is not too much to ask at the present time that the graduate department shall at least be creditable, and that the arts and technical work prescribed for professional degrees in at least *one* professional school shall be not less than five years. It is the thought of your committee that if this dual standard of admission be now accepted by the Association it may be possible to enforce it with increasing strictness as the years go by. It feels, however, that a step of the utmost importance would be taken if the Association now insisted on the dual requirement, even though in administering it concessions were, for a few years, made to some universities which were strong in the one direction, but not so fully developed in the other. Your committee is of the opinion that American universities cannot be justly standardized with reference to graduate departments alone; the requirement of a general or liberal education as a prerequisite to professional study along with an extension of the period of study for professional students being in the estimation of your committee an important consideration. It is of the opinion that American universities should be standardized with reference to these *two* criteria.

While your committee is very strongly of the opinion that the elevation of professional training is as important as the maintenance of a graduate school of arts and science, it now recommends for admission to the Association no universities whose graduate departments alone would not probably justify their inclusion. The universities it recommends for admission are the University of Illinois, the University of Minnesota, and the University of Missouri. These universities have graduate schools in each of which is enrolled from 100 to 200 members, and each of which confers annually from fourteen to twenty-five Masters' degrees and two or three Doctors' degrees. This is not, however, the only qualification of these institutions for admission. Both in Minnesota and Missouri the medical school is on a college basis, the latter requiring one year of college work and the former two. The University of Missouri also requires a first degree as a preliminary to a professional degree in engineering and architecture, which, however, may be earned either by one additional year of study or two additional years of professional occupation. The University of Illinois prescribes one year of college work in arts and science for admission to its School of Law—a requirement which indeed establishes a total collegiate and professional course of only

four years, but which perhaps justifies the expectation that the university will go further and require an additional year in Arts.

Your committee strongly believes that it is the duty of this Association to admit outstanding American universities as soon as they satisfy the criteria which have been laid down by the committee. Foreign governments, more particularly the Prussian and Dutch, now recognize the universities which are members of this Association and refuse recognition of those which are not. It is the duty of this Association either to standardize American universities, and thus justify the confidence which foreign governments repose in them, or to notify those governments that there are American universities outside this Association whose work and standing are not inferior to universities now members of the Association.

So far your committee has spoken only of the *universities* of the country. But our *colleges* are also suffering from the interpretation which foreign governments have put upon the existence and work of this Association. The best of them even find that their degrees are not recognized by foreign governments, even to the extent of permitting them to matriculate in foreign universities, on the ground that they are not members of the Association of American Universities. In the opinion of your committee the simplest way of correcting that injustice would be for this Association to make a list of the colleges of the country whose degrees it regards as of equal value with the college degrees conferred by the universities embraced in this Association. It happens, however, that another organization, for a purely financial reason, has been compelled to standardize a group of American colleges. That institution is the Carnegie Foundation for the Advancement of Teaching. The presidents of a number of institutions represented in this Association are members of the Board of Trustees of the Carnegie Foundation and the president of that foundation has seat and voice in this Association. The Carnegie Foundation has collected an enormous amount of valuable statistics and information regarding colleges, which it gladly puts at the disposal of other educational associations and agencies. It would seem very desirable, therefore, that the aid of this organization should be secured, if this Association is to undertake the standardizing of American colleges. And that it ought to undertake that task is the conviction of your committee, especially as the injustice done our American colleges by foreign governments is due to the existence and operations of this Association. And a further and still more convincing reason will exist for this Association's undertaking the work of standardizing American colleges if, as your committee has recommended, universities hereafter admitted to this Association shall rest their professional work on *college* work; for this Association as a body and the different universities which compose it would then all have before them the problem of determining what colleges in the country give instruction in arts and science which may be regarded as an equivalent of that given by the universities themselves.

Your committee accordingly recommends that the Association appoint a committee for the standardizing of American colleges, giving it instructions to secure the coöperation of the president of the Carnegie Foundation, who, in the name of the Association, should be officially invited to join in this undertaking.

All of which is respectfully submitted.

C. W. ELIOT, Harvard
J. G. SCHURMAN, Cornell
C. R. VAN HISE, Wisconsin
J. H. PENNIMAN, Pennsylvania
MUNROE SMITH, Columbia } Committee

APPENDIX II

REPORT OF THE EXECUTIVE COMMITTEE

To the Association of American Universities:

At the eighth annual conference of the Association of American Universities, held in Cambridge, November 23 and 24, 1906, the Executive Committee reported the following resolution:

Resolved, That the Association of American Universities would be glad to confer at the next meeting of the Association with a delegation representing the Central and South American universities and public educational authorities.

On motion this resolution was adopted and referred to the Executive Committee, with power, together with instructions that it be guided in considering the matter by the informal discussion of the subject at this meeting of the Association.

At a meeting of the Executive Committee held in New York, April 18, 1907, a special committee consisting of Mr. Carpenter, of Columbia University, and Mr. Child, of the University of Pennsylvania, was appointed to prepare a provisional list of such Latin-American institutions and authorities as should properly participate in the proposed conference, for submission to the Executive Committee for further action.

The special committee, in accordance with these instructions, communicated at once with Mr. John Barrett, director of the International Bureau of American Republics, in Washington, and eventually received from him a provisional list of the higher institutions of learning in the Latin-American countries, together with a recommendation to the committee to apply for additional information with regard to educational conditions and educational authorities to the consuls-general of these countries in New York. Mr. Barrett in the meantime on his own initiative asked the different ministers resident in Washington for similar information which was subsequently submitted to the committee. The committee acted upon Mr. Barrett's suggestions and communicated severally with the various consular representatives of the Latin-American countries in New York, who in the main responded with enthusiasm to the request of the committee to furnish such information as was at hand. In several instances the request was further submitted by the consuls themselves to the home authorities, and in others the committee was asked to communicate directly with the government through its minister of public instruction. In a few instances no acknowledgment whatever of the receipt of the committee's letter could be elicited from either consul or government, and no first-hand information in these cases was obtained.

The committee is also indebted to Professor Paul S. Reinsch, of the University of Wisconsin, to Professor L. S. Rowe, of the University of Pennsylvania, and to Professor William R. Shepherd, of Columbia University, for additional information gathered by them personally in South America and placed at the disposition of the committee.

As a result of the considerable correspondence that has been carried on in accordance with the foregoing statement, the committee would respectfully submit the following report and recommendations:

The list of the universities and institutions of approximately equal rank to each other in Latin America, as the committee has been able to compile it, is as follows:

LIST OF UNIVERSITIES AND EDUCATIONAL INSTITUTIONS IN LATIN AMERICA

| | |
|---------------------|--|
| Argentine Republic: | Universidad Nacional de Buenos Aires Universidad Nacional de Cordoba Universidad Nacional de La Plata, La Plata' |
| Bolivia: | Universidad de La Paz, La Paz Universidad de Sucre, Sucre |
| Brazil: | Escola Polytechnica Faculdade de Medicina Escolas de Sciencias Juridicas |
| Chile: | Universidad de Chile, Santiago Universidad Catolica, Santiago |
| Colombia: | Universidad Nacional, Bogota Universidad de Antioquia, Medellin |
| Costa Rica: | Escuela de Derecho, San José Escuela de Medicina y Farmacia, San José |
| Cuba: | Universidad de la Habana, Habana |
| Dominican Republic: | Universidad de Santo Domingo, Santo Domingo |
| Ecuador: | Universidad Central, Quito |
| Guatemala: | Escuela de Derecho y Notariado, Guatemala City Escuela de Medicina, Guatemala City |
| Haiti: | Université d'Haiti, Port-au-prince |
| Honduras: | Instituto de Jurisprudencia y Ciencias Politicas, Tegucigalpa Colegio de Medicina y Cirugia, Tegucigalpa |
| Mexico: | Escuela Nacional de Medicine, Mexico City Escuela Nacional de Jurisprudencia, Mexico City |
| Nicaragua: | Escuela National de Ingeneria Escuela de Derecho y Notariado, Managua Escuela de Medicina y Farmacia, León |
| Paraguay: | Universidad Nacional de Asunción, Asunción |
| Peru: | Universidad Mayor de San Marcos, Lima |
| Salvador: | Universidad Nacional, San Salvador |
| Uruguay: | Universidad de Montevideo |
| Venezuela: | Universidad Central, Caracas Universidad de Merida, Merida |

With regard to the list there is this to be said in detail. There is no university in Brazil. The existing schools of science, medicine, and law, as indicated, together with certain other institutions, apparently might well form a university nucleus, but no such combination has yet been effected. On the other hand, the so-called universities of Trujillo and Cuzco, in Peru, and of Cuenca, in Ecuador, are institutions of minor importance and may with propriety be omitted from the list. For the sake of completeness of representation, the Escuela Normal, of Panama, in the absence of any higher institution, is included in the list, although it is hardly more than a high school. Costa Rica, Guatemala, Honduras, Mexico, and Nicaragua have no universities in name, but these various professional schools of law and medicine undoubtedly should appear. It should finally be stated that, as already indicated in the case of certain universities, in Peru and Ecuador, the name "university" has by no means a constant value in Latin America, any more than it has in the United States. It may well be that the list of institutions here submitted is in this way misleading. It is, however, believed by the committee to be reasonably complete and sufficiently representative to form a working basis in the manner originally desired by the Association.

The original resolution of the Executive Committee, as reported to the Association, contemplated the possibility of a conference with the representatives of the Latin-American universities and public educational authorities at the present meeting of the Association. The Association, however, in adopting the resolution, referred the whole matter to the Executive Committee, with power. Your committee, in its investigation of the conditions of education in Latin America as they actually exist, early came to the conclusion that an attempt to bring about such a conference at this time on short notice would be futile. The participation of Latin-American countries in the proposed conference, it is needless to say, should be general and as representative as it is possible to make it. In some of these countries there is an understanding of the advantage that would inhere in a closer contact with the educational institutions of the United States and a desire to further educational reciprocity, as is evidenced, for instance, by the formal agreement already concluded between the National University of La Plata, in the Argentine Republic, and the University of Pennsylvania, whereby an active interchange of resources is secured and the opportunities of both institutions along important lines are visibly promoted. Prominent educators in several of these countries have expressed themselves enthusiastically in favor of coöperation and would undoubtedly support a movement to promote it. In others, however, there is only a lukewarm and inactive interest in the matter and it is most certain that many of them would not participate in a conference held far away and under unfamiliar conditions.

The countries of Latin America have held in recent years a series of scientific congresses, each of which in succession has assumed larger proportions. At present these congresses represent the most important medium of intellectual intercourse between the Latin-American countries. The first of these congresses was held in Buenos Aires, in 1898; the second in Montevideo, in 1901; the third in Rio de Janeiro, in 1905; and the fourth will be held in Santiago, Chile, December, 1908.

This congress has been made a "Pan-American" congress, instead of "Latin-American," and invitations have recently been sent out by the congress through Secretary Root to the leading universities in the United States to send delegates thereto.

The congress will be divided into the following sections:

- I. Pure and Applied Mathematics
- II. Physical Sciences
- III. Natural Sciences
- IV. Medicine and Hygiene
- V. Jurisprudence, Political and Social Sciences
- VI. History, Languages, and Fine Arts
- VII. Pedagogy
- VIII. Agriculture and Animal Husbandry
- IX. Industrial Processes

Each institution is invited to send as many delegates as it may see fit. The language to be used in the congress is Spanish.

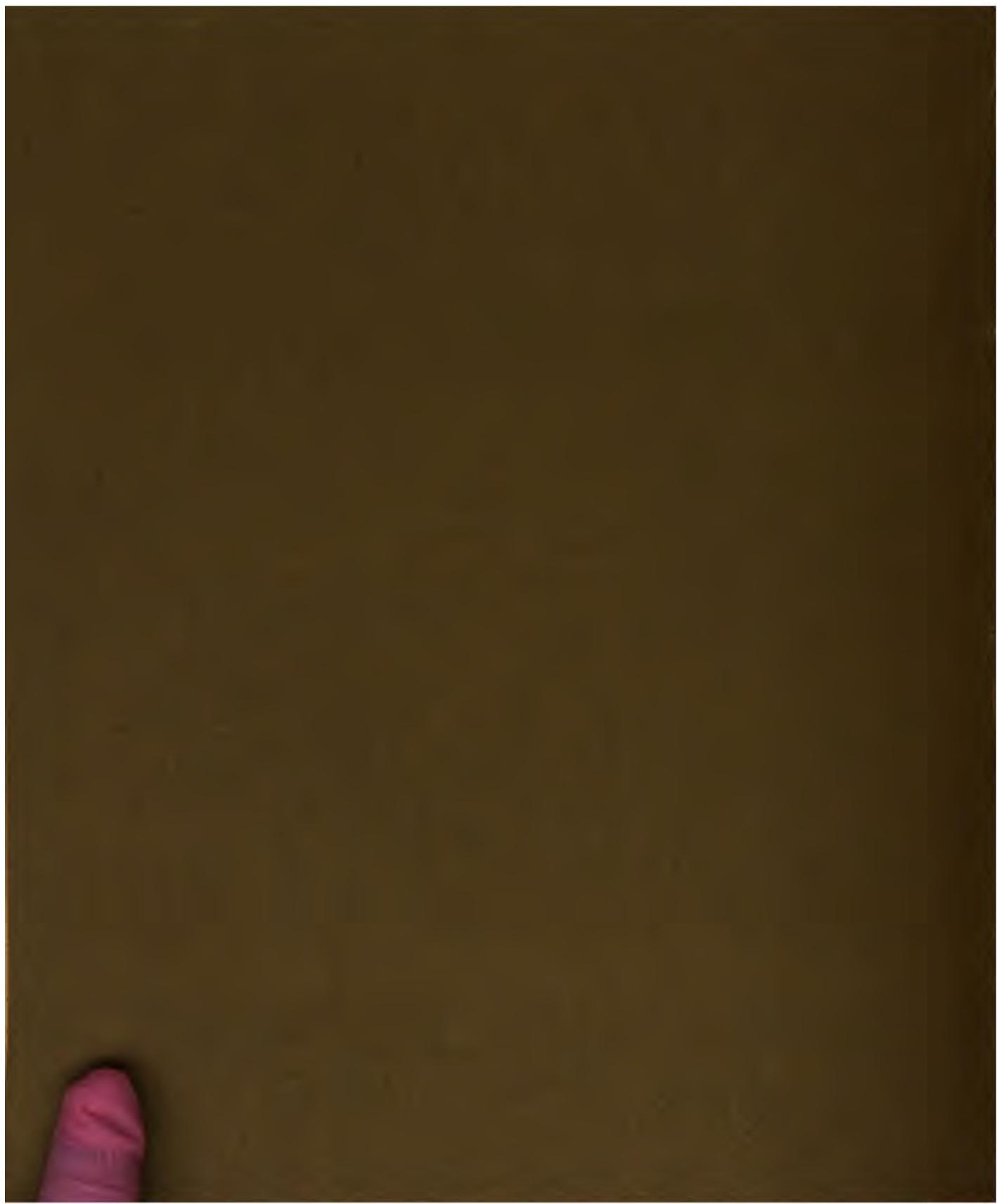
It is thought by the committee that an occasion for such an educational conference as is proposed is opportunely provided by this congress, in a manner and to a degree otherwise not readily attainable. The government of Uruguay, through the minister of Uruguay in Washington, has issued invitations to American universities to participate in an International Congress of American Students to be held at Montevideo, January 26 to February 2, 1908. In the opinion of the com-

mittee this congress, however, has not the importance and does not present the opportunity of the Chilian congress at a later date.

Having in mind the absence of an adequate general fund which could be employed for the purpose of defraying the expense of a representation by delegates, or delegate, appointed directly by the Association, the committee would respectfully submit the following recommendation:

That the members of the Association be invited to name to the secretary of the Association such delegates to the Santiago congress as they may individually desire to appoint; and that the secretary be empowered to issue to such delegates, in the name of the Association, the proper credentials to constitute them its lawful representatives to serve under such instructions as the Association may determine to give in the premises.





The ASSOCIATION
OF AMERICAN
UNIVERSITIES

*The Tenth
Annual Conference*

HELD IN
ITHACA, NEW YORK
January Seventh and Eighth, 1909



*THE ASSOCIATION
OF
AMERICAN UNIVERSITIES*

1908—1909

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The Association of American Universities

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OF THE
TENTH ANNUAL CONFERENCE

HELD IN
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CONTENTS

| | PAGE |
|---|----------|
| MEMBERSHIP | 7 |
| CALENDAR OF CONFERENCES | 8 |
| OFFICERS | 8 |
| PROCEEDINGS OF THE TENTH ANNUAL CONFERENCE | 9 |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 9 |
| FIRST SESSION—MINUTES | 9 |
| SECOND SESSION—MINUTES | 11 |
| THIRD SESSION—MINUTES | 11 |
| FOURTH SESSION—MINUTES | 12 |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 13 |
| PAPERS AND DISCUSSIONS AT THE TENTH ANNUAL CONFERENCE: | |
| THE SECOND SESSION: | |
| PAPER on “ <i>The Reorganization of School Systems with Incidental Reference to Preparation for the Professional School,</i> ” by Messrs. Stringham and Lange | 14 |
| DISCUSSION by Mr. Stratton, p. 24; Mr. Northrop, p. 24; Mr. Stratton, p. 24; Mr. Northrop, p. 24; Mr. Stratton, p. 25; Mr. Northrop, p. 25; Mr. Stratton, p. 25; Mr. Northrop, p. 25; Mr. Van Hise, p. 25; Mr. Stratton, p. 26; Mr. Northrop, p. 26; Mr. Crothers, p. 26; Mr. Fine, p. 27; Mr. Stratton, p. 28; Mr. Hill, p. 28; Mr. Hadley, p. 28; Mr. Baldwin, p. 29; Mr. Eliot, p. 29. | |
| THE THIRD SESSION: | |
| PAPER on “ <i>The College in the University,</i> ” by Mr. Willcox | 31 |
| DISCUSSION by Mr. Fine, p. 41; Mr. Eliot, p. 41; Mr. Schurman, p. 42; Mr. Eliot, p. 42; Mr. Judson, p. 43; Mr. Eliot, p. 43; Mr. Schurman, p. 44; Mr. Eliot, p. 44; Mr. Schurman, p. 44; Mr. Eliot, p. 45; Mr. Schurman, p. 45; Mr. Eliot, p. 45; Mr. Schurman, p. 46; Mr. Eliot, p. 46; Mr. Schurman, p. 46; Mr. Vaughan, p. 46; Mr. Northrop, p. 47; Mr. Eliot, p. 47; Mr. Munroe Smith, p. 47; Mr. Eliot, p. 49. | |
| THE FOURTH SESSION: | |
| PAPER on “ <i>The Lack of Uniformity in the Amount of Previous Study Required in Principal, or Major, Subjects for Admission to Graduate Courses,</i> ” by Mr. Kinley | 49 |
| DISCUSSION by Mr. Hadley, p. 57; Mr. Magie, p. 57; Mr. Kinley, p. 58; Mr. Baldwin, p. 58; Mr. Hill, p. 59; Mr. Judson, p. 59; Mr. Ames, p. 59; Mr. Page, p. 60; Mr. Eliot, p. 60; Mr. Baldwin, p. 61; Mr. Eliot, p. 61; Mr. Baldwin, p. 62; Mr. Eliot, p. 63; Mr. Angell, p. 63; Mr. Eliot, p. 63; Mr. Angell, p. 63. | |

Contents

| | PAGE |
|--|-----------|
| APPENDICES | 64 |
| REPORT OF THE EXECUTIVE COMMITTEE | 64 |
| REPORT OF THE SPECIAL COMMITTEE ON AIM AND SCOPE OF THE ASSOCIATION | 65 |
| REPORT OF THE SPECIAL COMMITTEE ON UNIVERSITY NOMENCLATURE | 67 |
| SPECIAL REPORT OF THE EXECUTIVE COMMITTEE | 69 |

MEMBERSHIP
OF
THE ASSOCIATION OF AMERICAN UNIVERSITIES

| | |
|------------------------------------|---------------------------------|
| UNIVERSITY OF CALIFORNIA, | Berkeley, California |
| CATHOLIC UNIVERSITY OF AMERICA, | Washington, D. C. |
| THE UNIVERSITY OF CHICAGO, | Chicago, Illinois |
| CLARK UNIVERSITY, | Worcester, Massachusetts |
| COLUMBIA UNIVERSITY, | New York, New York |
| CORNELL UNIVERSITY, | Ithaca, New York |
| HARVARD UNIVERSITY, | Cambridge, Massachusetts |
| UNIVERSITY OF ILLINOIS, | Urbana, Illinois |
| -INDIANA UNIVERSITY, | Bloomington, Indiana |
| -THE STATE UNIVERSITY OF IOWA, | Iowa City, Iowa |
| THE JOHNS HOPKINS UNIVERSITY, | Baltimore, Maryland |
| - UNIVERSITY OF KANSAS, | Lawrence, Kansas |
| LELAND STANFORD JUNIOR UNIVERSITY, | Stanford University, California |
| UNIVERSITY OF MICHIGAN, | Ann Arbor, Michigan |
| UNIVERSITY OF MINNESOTA, | Minneapolis, Minnesota |
| UNIVERSITY OF MISSOURI, | Columbia, Missouri |
| - THE UNIVERSITY OF NEBRASKA, | Lincoln, Nebraska |
| UNIVERSITY OF PENNSYLVANIA, | Philadelphia, Pennsylvania |
| PRINCETON UNIVERSITY, | Princeton, New Jersey |
| UNIVERSITY OF VIRGINIA, | Charlottesville, Virginia |
| UNIVERSITY OF WISCONSIN, | Madison, Wisconsin |
| YALE UNIVERSITY, | New Haven, Connecticut |

CALENDAR OF CONFERENCES

FIRST ANNUAL CONFERENCE (organization),
Chicago, February 27, 28, 1900

SECOND ANNUAL CONFERENCE,
Chicago, February 26-28, 1901

THIRD ANNUAL CONFERENCE,
Chicago, February 25-27, 1902

FOURTH ANNUAL CONFERENCE,
New York, December 29-31, 1902

FIFTH ANNUAL CONFERENCE,
New Haven, February 18-20, 1904

SIXTH ANNUAL CONFERENCE,
Baltimore, January 12-14, 1905

SEVENTH ANNUAL CONFERENCE,
San Francisco, Berkeley, and Palo Alto,
March 14-17, 1906

EIGHTH ANNUAL CONFERENCE,
Cambridge, November 23, 24, 1906

NINTH ANNUAL CONFERENCE,
Ann Arbor, January 9, 10, 1908

TENTH ANNUAL CONFERENCE,
Ithaca, January 7, 8, 1909

OFFICERS

1909-10

President—The representative of Princeton University.

Vice-President—The representative of University of Virginia.

Secretary—The representative of Harvard University (to serve for a period of five years).

Additional members of the *Executive Committee*—The representative of Cornell University;
the representative of Columbia University.

THE TENTH ANNUAL CONFERENCE

FIRST DAY'S PROCEEDINGS

THURSDAY, JANUARY 7, 1909

MINUTES

MEETING OF THE EXECUTIVE COMMITTEE

A meeting of the Executive Committee was held on Thursday, January 7, 1909, at 9 A. M., in the Reading-Room of the Law Library, Boardman Hall.

There were present the following members of the Executive Committee:

For University of Michigan, *President*—Mr. Angell
For Leland Stanford Junior University, *Vice-President*—Mr. Crothers
For Harvard University, *Secretary*—Mr. Warren
For Columbia University—Mr. Carpenter
For Cornell University—Mr. Schurman

The Secretary presented the Financial Report, which, upon motion, was approved.

RECEIPTS:

| | |
|---|----------|
| From assessments 1908-9 | \$720.00 |
| Interest | 7.34 |
| Balance on hand, turned over by Columbia University | 30.85 |
| | <hr/> |
| | \$758.19 |

EXPENDITURES:

| | |
|---|----------|
| For reporting Ninth Conference | \$ 44.00 |
| For printing proceedings, Ninth Conference | 253.00 |
| For distributing journals, Ninth Conference | 24.82 |
| For postage, express, telegrams, and sundries | 18.86 |
| For printing programs, Tenth Conference | 11.00 |
| Exchange | .50 |
| | <hr/> |
| | \$352.18 |
| | <hr/> |
| Balance on hand January 7, 1909 | \$406.01 |

The Secretary presented the report of the EXECUTIVE COMMITTEE which, upon motion, was approved.

The Committee adjourned at 10 A. M.

FIRST SESSION

The First Session was called to order in the Reading-Room of the Law Library, at 10 A. M., with Mr. Angell, of the University of Michigan, in the chair.

The following representatives were present:

UNIVERSITY OF CALIFORNIA—Mr. George M. Stratton
CATHOLIC UNIVERSITY OF AMERICA—Mr. George Melville Bolling

CALENDAR OF CONFERENCES

FIRST ANNUAL CONFERENCE (organization),
Chicago, February 27, 28, 1900

SECOND ANNUAL CONFERENCE,
Chicago, February 26-28, 1901

THIRD ANNUAL CONFERENCE,
Chicago, February 25-27, 1902

FOURTH ANNUAL CONFERENCE,
New York, December 29-31, 1902

FIFTH ANNUAL CONFERENCE,
New Haven, February 18-20, 1904

SIXTH ANNUAL CONFERENCE,
Baltimore, January 12-14, 1905

SEVENTH ANNUAL CONFERENCE,
San Francisco, Berkeley, and Palo Alto,
March 14-17, 1906

EIGHTH ANNUAL CONFERENCE,
Cambridge, November 23, 24, 1906

NINTH ANNUAL CONFERENCE,
Ann Arbor, January 9, 10, 1908

TENTH ANNUAL CONFERENCE,
Ithaca, January 7, 8, 1909

OFFICERS

1909-10

President—The representative of Princeton University.

Vice-President—The representative of University of Virginia.

Secretary—The representative of Harvard University (to serve for a period of five years).

Additional members of the *Executive Committee*—The representative of Cornell University;
the representative of Columbia University.

THE TENTH ANNUAL CONFERENCE

FIRST DAY'S PROCEEDINGS

THURSDAY, JANUARY 7, 1909

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The Secretary presented the Financial Report, which, upon motion, was approved.

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| | <u>\$352.18</u> |
| | <u>\$352.18</u> |

Balance on hand January 7, 1909 \$406.01

The Secretary presented the report of the EXECUTIVE COMMITTEE which, upon motion, was approved.

The Committee adjourned at 10 A. M.

FIRST SESSION

The First Session was called to order in the Reading-Room of the Law Library, at 10 A. M., with Mr. Angell, of the University of Michigan, in the chair.

The following representatives were present:

UNIVERSITY OF CALIFORNIA—Mr. George M. Stratton
CATHOLIC UNIVERSITY OF AMERICA—Mr. George Melville Bolling

The Association of American Universities

THE UNIVERSITY OF CHICAGO—Mr. Harry Pratt Judson
COLUMBIA UNIVERSITY—Mr. William Henry Carpenter, Mr. Munroe Smith
CORNELL UNIVERSITY—Mr. Jacob Gould Schurman, Mr. Walter F. Willcox
HARVARD UNIVERSITY—Mr. Charles William Eliot, Mr. Joseph Warren
UNIVERSITY OF ILLINOIS—Mr. David Kinley
THE JOHNS HOPKINS UNIVERSITY—Mr. J. Mark Baldwin
LELAND STANFORD JUNIOR UNIVERSITY—Mr. George Edward Crothers
UNIVERSITY OF MICHIGAN—Mr. James B. Angell, Mr. Victor C. Vaughan
UNIVERSITY OF MISSOURI—Mr. Albert Ross Hill
UNIVERSITY OF PENNSYLVANIA—Mr. Herman V. Ames
PRINCETON UNIVERSITY—Mr. Harry Burchard Fine, Mr. William Francis Magie
UNIVERSITY OF WISCONSIN—Mr. Charles R. Van Hise

The minutes of the preceding Conference were approved as printed.
The Executive Committee presented a report (see p. 64), and, upon motion, the report was accepted.

The Secretary presented the FINANCIAL REPORT, previously approved by the Executive Committee, and, upon motion, the report was accepted.

Mr. Willcox, of Cornell University, and Mr. Warren, of Harvard University, were appointed by the Chair to prepare reports of the meeting for the press.

Upon authorization of the Association, the Chair appointed the following Committee on Nominations:

Mr. Van Hise, representing the University of Wisconsin
Mr. Fine, representing Princeton University
Mr. Carpenter, representing Columbia University

and the following Committee on Place:

Mr. Eliot, representing Harvard University
Mr. Schurman, representing Cornell University
Mr. Judson, representing The University of Chicago

Mr. Eliot, representing Harvard University, Chairman of the Special Committee on Aim and Scope, appointed at the Ninth Annual Conference, presented the report of that committee, made a special order for the First Session of the Conference (see p. 65).

Upon motion, the report and recommendations of the Special Committee on Aim and Scope was unanimously adopted, and the Universities of Kansas and Nebraska, Indiana University, and the State University of Iowa, were declared duly elected to membership in the Association.

Upon motion, this special committee was continued, with University of Missouri as an additional member, to continue the investigation of the matters involved in this report, and to report thereon at the Eleventh Annual Conference.

Upon motion, the report of the Special Committee on University Nomenclature,

appointed at the Ninth Annual Conference, made a special order for the First Session of the Conference, was made a special order for the Fourth Session.

The Session adjourned at 12:45 P. M.

The delegates were entertained at luncheon by the Trustees of Cornell University at Sage College.

SECOND SESSION

The Session was called to order at 2:30 P. M., with Mr. Angell, of the University of Michigan, in the chair.

The following delegates were present in addition to those of the preceding Session:

For University of Minnesota—Mr. Cyrus Northrop

For Yale University—Mr. Arthur T. Hadley

Mr. Stratton, on behalf of the University of California, presented a PAPER prepared by Professor Irving Stringham and Professor Alexis F. Lange on "The Reorganization of School Systems with Incidental Reference to Preparation for the Professional School."

The following delegates took part in the DISCUSSION which followed: Mr. Stratton (p. 24), Mr. Northrop (p. 24), Mr. Stratton (p. 24), Mr. Northrop (p. 24), Mr. Stratton (p. 25), Mr. Northrop (p. 25), Mr. Stratton (p. 25), Mr. Northrop (p. 25), Mr. Van Hise (p. 25), Mr. Stratton (p. 26), Mr. Northrop (p. 26), Mr. Crothers (p. 26), Mr. Fine (p. 27), Mr. Stratton (p. 28), Mr. Hill (p. 28), Mr. Hadley (p. 28), Mr. Baldwin (p. 29), Mr. Eliot (p. 29).

The Session adjourned at 4:45 P. M.

The delegates attended a performance by the Sage Chapel Chorus, accompanied by the University Orchestra, at Sage Chapel.

THIRD SESSION

The Session was called to order at 8:30 P. M., with Mr. Angell, of the University of Michigan, in the chair.

The following delegate was present in addition to those of the preceding sessions:

For University of Virginia—Mr. J. M. Page

Mr. Willcox, on behalf of Cornell University, presented a PAPER on "The College in the University."

The following delegates took part in the DISCUSSION which followed: Mr. Fine (p. 41), Mr. Eliot (p. 41), Mr. Schurman (p. 42), Mr. Eliot (p. 42), Mr. Judson (p. 43), Mr. Eliot (p. 43), Mr. Schurman (p. 44), Mr. Eliot (p. 44), Mr. Schurman (p. 44), Mr. Eliot (p. 45), Mr. Schurman (p. 45), Mr. Eliot (p. 45), Mr. Schurman (p. 46), Mr. Eliot (p. 46), Mr. Schurman (p. 46), Mr. Vaughan (p. 46), Mr. Northrop (p. 47), Mr. Eliot (p. 47), Mr. Munroe Smith (p. 47), Mr. Eliot (p. 49).

The Session adjourned at 11:00 P. M.

SECOND DAY'S PROCEEDINGS

FRIDAY, JANUARY 8, 1909

FOURTH SESSION

The Session was called to order at 10 A. M., with Mr. Angell, of the University of Michigan, in the chair.

Mr. Kinley, on behalf of the University of Illinois, presented a PAPER on "The Lack of Uniformity in the Amount of Previous Study Required in Principal, or Major, Subjects for Admission to Graduate Courses."

The following delegates took part in the DISCUSSION which followed: Mr. Hadley (p. 57), Mr. Magie (p. 57), Mr. Kinley (p. 58), Mr. Baldwin (p. 58), Mr. Hill (p. 59), Mr. Judson (p. 59), Mr. Ames (p. 59), Mr. Page (p. 60), Mr. Eliot (p. 60), Mr. Baldwin (p. 61), Mr. Eliot (p. 61), Mr. Baldwin (p. 62), Mr. Eliot (p. 63), Mr. Angell (p. 63), Mr. Eliot (p. 63), Mr. Angell (p. 63).

The Committee on Nominations reported as follows:

For *President*—The representative of Princeton University

For *Vice-President*—The representative of the University of Virginia

For *Secretary*—The representative of Harvard University (appointed at the Ninth Conference to serve for five years)

For additional members of the *Executive Committee*—The representative of Cornell University; the representative of Columbia University.

The nominations of the Committee were approved, and the officers named were declared duly elected.

The Committee on Place recommended that the invitation offered by the University of Wisconsin for the Eleventh Conference be accepted.

The recommendation of the Committee was approved, and the invitation of the University of Wisconsin for the Eleventh Conference was duly accepted.

Upon motion, the question of the time of the Eleventh Conference was referred to the Executive Committee, with power.

Upon motion, a resolution proposed for adoption by the Association by the Chairman of the Committee on Lectures at the University of Wisconsin, as follows:

IN VIEW of the desirability of facilitating the arrangements for the appearance of distinguished scholars and public men before the prominent American universities,

Be it Resolved, That this Association recommends to each of its constituent universities the appointment of a Lecture Committee or similar Committee of the Faculty; that the Chairman of such Committee act as its correspondent; that each such Chairman (upon request or otherwise, as may be determined) communicate to the several Chairmen of such Committees such plans and suggestions for the appearance of lecturers or speakers as may be under consideration, and invite as well as give opportunity for other universities to participate in such arrangements.

It is understood that this Association accepts no responsibility for arrangements thus made, but merely extends the courtesy of its organization to inaugurate a mode of coöperation among universities for their mutual benefit. The coöperation is particularly desirable with reference to the tours in this country of foreign scholars; as in many cases a joint invitation could be extended which no single university would be in a position to extend. It is further urged that in cases in which one university or another has taken the initiative, others would be ready to share the responsibility were the opportunity given to them. It is likely that with such a means of co-operation once established, further useful extensions thereof would be developed,

► was referred to the Executive Committee, with instructions to report thereon at the next Conference.

Mr. Van Hise, on behalf of University of Wisconsin, Chairman of the Special Committee on University Nomenclature, presented the report of that Committee, made at the First Session a special order for the Fourth Session (see p. 67).

Upon motion, the report and recommendations of the Special Committee on University Nomenclature were unanimously adopted.

Upon motion, the following resolution was adopted:

Resolved, That the members of The Association of American Universities, in session at Cornell University, wish to express their cordial thanks to the authorities of Cornell University for their hospitable reception and entertainment of the Association.

Upon motion, the Session adjourned at 12:50 P. M. *sine die*, after which the delegates were entertained at luncheon at the residence of President Schurman, of Cornell University.

MEETING OF THE EXECUTIVE COMMITTEE

After the adjournment of the Fourth Session, a meeting of the Executive Committee was held in the Reading Room of the Law Library, January 8, 1909, at 12:55 P. M. The following representatives were present:

For Princeton University, *President*—Mr. Fine
For University of Virginia, *Vice-President*—Mr. Page
For Harvard University, *Secretary*—Mr. Warren
For Cornell University—Mr. Schurman
For Columbia University—Mr. Carpenter

Upon motion, it was

Resolved, That the matters referred by the Association to the Executive Committee may be treated in the usual manner by correspondence.

The Committee adjourned at 1 o'clock.

THE ASSOCIATION OF AMERICAN UNIVERSITIES
PAPERS AND DISCUSSIONS DURING THE TENTH ANNUAL
CONFERENCE

SECOND SESSION

THE REORGANIZATION OF SCHOOL SYSTEMS WITH INCIDENTAL
REFERENCE TO PREPARATION FOR THE
PROFESSIONAL SCHOOL

PAPER PREPARED ON BEHALF OF THE UNIVERSITY OF CALIFORNIA BY PROFESSOR IRVING
STRINGHAM AND PROFESSOR ALEXIS F. LANGE, AND PRESENTED
BY PROFESSOR GEORGE M. STRATTON

I

At the Ann Arbor meeting of our Association Professor Vaughan gave a very interesting and exhaustive account of the difficulties our professional schools encounter in their efforts to attain an adequate standard of admission without involving too great a time requirement. The discussion of Professor Vaughan's paper brought out clearly the fact that the time-element constitutes a prime difficulty. None of the speakers thought it proper to insist on a programme of combined secondary, academic, and professional studies which should require a student apprenticeship of longer duration than ten years; four years of secondary, two years of strictly academic, and four years of combined academic and professional study. Neither the Harvard nor the Johns Hopkins delegate, however, discussed this phase of the subject; and whether or not the Bachelor's degree should be regarded as an essential prerequisite for admission to the professional school was not touched upon. Nor does this paper discuss the merits of this question. But incidentally its plan of campaign involves it because the California movement for reorganized programmes of study in the secondary school began at the upper end of the scale, in the university, and is progressing downward toward the grammar school. This movement was stimulated by the desire of both university and high-school authorities to realize more effectively the benefits of an already organized upper division of combined university and collegiate studies, in which the foundation work for the professional schools may be included as belonging to the university group.

The Harvard prerequisite for admission to her professional schools is, or is to be, the bachelor's degree. It is fortunate that one institution can maintain such a standard; if other universities shall be able to follow Harvard's example (as Johns Hopkins already does

in her medical school) their success will aid every other institution in maintaining their own standards against a resistant public opinion. When all are trying to move forward, all honor to the foremost.

But whatever happens at the point of contact between the undergraduate course and the professional school, whatever articulative devices are constructed for making the contact at this upper level more intimate, the same sort of problem of adjustment and articulation at the lower levels remains—at the transition from high school to college, and from grammar school to high school.

Some years ago there went forth from Cambridge the criticism that American public schools fall short, in point of time, by about two years, of achieving results that are both desirable and possible for those pupils who are destined for careers in college and university; results in fact that are actually achieved by European educational systems, so that American students reach the beginning of their studies for a profession some two years later than their European competitors. If the exactness of this time-estimate of two years be not too rigorously insisted on, the criticism stands as yet unchallenged.

In response to such criticism it was inevitable that the university should insist on a higher standard of preparatory training in the secondary school, for here effective means to the desired end could be applied; but, because there is no organic connection between the grammar and the high schools, it was also inevitable that the pressure thus brought to bear would have effect only at its point of application. And so it happens that, in these last years, the high schools of our country have been in a continuous state of self-concern, have sought anxiously for good reputations and have achieved them, while the grammar schools have remained passive, the paradise of listless or indolent pupils, and of unambitious teachers. In California we are trying to demonstrate that in the upper grades of the grammar school is to be found the vulnerable spot to which a well-aimed effort for the prevention of wasted energy, on the part of prospective college students, may be successfully directed.

As sponsors for the higher educational and professional welfare of the nation we, the members of this Association, are engaged in a strenuous effort to make efficient that part of our educational system for which public opinion holds us directly responsible and we are prone, nay perhaps are quite willing, to neglect the opportunity, even when it is within our grasp, of assuming our share of that larger responsibility, which looks at the educational problem in its entirety, and asks: What adjustments of our educational mechanism will best promote the welfare of the people?

To this question we invite your attention.

II

Nothing, it would seem, can stay the tide of American conviction that educational facilities must be consecutive. The question is no longer: Shall the high school live unto itself? but: How shall it live with its neighbors on either side? Of what sort shall the interschool railway be which provides that all may travel at their pleasure, some to the

end, others to intermediate terminals, always with stopover privileges? The main line, as it happens, was constructed roughly but durably in three sections, mechanically divided. Must educational conductors go on assuming that the boy or girl traveler is ticketed roughly but durably in three sections, mechanically divided?

This last question points to the first aim toward which further development needs to be directed. Education must become more continuous, not mechanically but organically. The sixteen or more grades of our school system must come to stand approximately for as many adaptations to uninterrupted growth. The educational edifice erected by the nineteenth century still resembles too closely an irregular pyramid of three boxes, the tops and bottoms of which are perforated in order that the more acrobatic pupils may vault from the known into the unknown. The twentieth century cannot accept this arrangement as final. The structure as seen from the outside may well remain intact; but the provisional tops and bottoms must be refitted, if not removed. Now, one essential in preparing for this task is to realize that adolescence begins at least two years earlier and ends about two years later than the inherited accidental high-school period. Divested of artificial meanings, secondary education is seen to cover not less than eight grades instead of four. Another essential is, of course, to act upon this insight. A high school is a psychological anachronism until it is extended to include the upper grammar and the first two college grades. Fortunately, college and high-school teachers, in California, at any rate, have already formed the habit of coöperating, in spite of many a collision of heads in the dark, followed by strong language. One consequence is that the state university has practically moved its main entrance two steps farther up, and another that vitally graduated instruction and organic articulations of curricula, aims, and methods are no longer wholly among the things not seen but hoped for. Nor does it take a prophet to predict that, here and there in the state, high schools will soon be given their full natural height and their courses linked to the third-year work of the two universities. Less progress, one is sorry to see, has been made in getting high-school men and women and the teachers of the upper grammar grades used to one another as coworkers in the training of adolescent boys and girls. But it should be possible even now to call into being joint standing committees everywhere on the common problem of how to make the seventh and eighth grades and those immediately following contribute to the normal development from childhood into youth and conform to individual and social needs. A concerted movement of this or some other practicable sort is particularly necessary in the interest of those who are compelled to cut short their preparation for living in order to make a living. For them above all, the last two grades of the grammar school must come to mean two years with a forward look; that is, two years controlled by the outlook upon the world of man and of nature, by the greater or lesser freedom in the choice of studies according to aptitude and prospects, by the aims and methods of instruction and training that characterize secondary, as distinguished from elementary, education. But to make these grades vitally culminal for the majority means at the same time that they would be more vitally basal for the minority, for those who will take a high-school course, provided this

is properly adjusted to stages of growth, and articulated with what goes before. As for subject-matter, the only radical change needed to complete the square deal for all concerned would be the opening of a chance to begin a foreign language earlier than at present. Until such opportunity be offered during the pre-high-school period, the grammar school will not be of all, by all, for all, contrary to fact as this statement may seem to one steeped in the lower mythology of democracy, or the American patriotism of ignorance.

One of the practical results almost sure to follow the inner changes just sketched would be a rational unstiffening of outer adjustments and a democratic extension of educational advantages. A two-year high school fixed above the grades, like a thin top rail in a snake fence, may not seem worth the cost, but as organic continuation it would contribute human wealth to any community too poor or shifting to do better. In other communities it might be found safe and expedient to annex definitively the upper end of the grammar school to the four-year high school. In wealthier urban centers the term high school would come to stand for six years of secondary education beyond the eight-year grammar school, or better, eight years of secondary education beyond the six-year primary school, and this would mean not only that the Freshman and Sophomore classes in the universities would grow less obese and hence more educable, not only that the expenses of university study would be halved for hundreds, but also, and especially, that thousands who are now deprived of such a privilege could obtain an education that is not truncated before the end of adolescence is reached. Cast out the four-year superstition, and a few other evils we are possessed of, and public opinion will before long sanction two-, four-, six-, and even eight-year high schools for the general welfare.

But more plainly visible to the naked eye than the need of vital continuity and flexibility is that of enlarging the girth of secondary education. Its cultural mission, to begin with, can no longer be fulfilled through the so-called culture studies alone. Little by little we shall doubtless learn to teach mathematics and the sciences, history and civil government, literature and the languages so as to start with actual life for knowing and to come back to it for doing, but even then we cannot wisely leave out the subjects that specifically epitomize the economic activities of our contemporary civilization and lead over to the material side of the world's work. What life has ceased to give, the school must supply and improve on. Quite apart from vocational issues, efficient citizenship, the very heart of liberal culture from the viewpoint of democracy, demands nowadays a trinity of developed senses—a vivid historic sense, the scientific evolutional sense, and a practical economic sense. It implies that neither those who can and will prolong their school careers nor those who must cut them short should be deprived of the chance to get and keep in active, intelligent, sympathetic touch with the work and the workers of our farms, our industries, our commerce. Accordingly, no high school is fully adequate to its cultural purposes until it has a department of agriculture, or of commerce, or of the mechanical and the domestic arts, a department accessible not only to the incurables but to every student, a department in charge of teachers every whit as broadly and thoroughly trained and as civi-

lized as those of other departments ought to be. The universities must further this development by training teachers and by welcoming the student who has had the good fortune, or good sense, to choose some of the courses in applied knowledge along with the rest. Sweetness and light and overalls are a perfectly feasible and very effective combination.

In most communities of California, high schools with this range of man-centered aims and activities would go far, for some time to come, toward meeting also the vocational or work-centered aims and needs of our youth, provided, of course, the grammar schools were similarly adapted everywhere to the particular world of their own environment. In most of them it would be worse than thoughtless to promote social cleavage by copying the German system of separate technical institutions. In most of them it would be nothing short of criminal malpractice to arrest the development and fix the future of boys and girls by bringing on the training in the routine of a specific calling before the end of the second or even the end of the fourth high-school year. A wise public policy demands a development analogous to that of many state universities, the general management of which is one, the institutional spirit one, the student body one, while the work of each department culminates in some type of social efficiency—in law, in engineering, in agriculture, in what not else—on the basis of illuminating courses with chiefly man-building aims. Vocational department projections, radiating from the middle or end of the cultural high school, yes; vocational schools as substitutes, no, except where, as is clearly the case in industrial and commercial centers, the old Jewish saying applies: "He that does not teach his son a trade does the same as if he taught him to steal." Modernized, this means that that society commits suicide which does not furnish the means whereby the boys and girls, that for any reason cannot go far beyond the grammar grades, may become trained, self-supporting, self-respecting workers. Taught by modern necessity, the city of Munich maintains forty continuation schools for as many trades. Taught by the same necessity, as well as by the democratic platform of equal opportunity, American communities will have to create more vocational schools of secondary grade than hitherto. In the interest, however, of both the individual and of the common weal our educational expansion must be guided by three principles. First, no technical school must be so narrow in aim and scope as to cheat the pupil out of his heritage of race culture as embodied in language and the institutional achievements of his people. Second, no cultural high school must be allowed to become so narrow in aim and scope as to deprive its pupils of the opportunity of acquiring the economic sense and of finding themselves and their fellow-men by many-sided doing, related directly at some point or other to the business, or the agriculture, or the industries of the nation. Third, other things being equal, the surest guaranty of living together in the bonds of peace and of advancing together on the road of national destiny is the co-education of all sorts and conditions of young people.

An objector may here interpose a pertinent inquiry: Does your eight-year plan of internal reorganization of secondary-school and college programmes, ending with the Sophomore year of the college, contemplate the introduction of the elective principle at the beginning

of the seventh grade of the grammar school? The answer is, yes, wherever local conditions permit it without too great a burden of taxation. It especially proposes the beginning of a foreign language, at this parting of the ways for so many of our young people, wherever voluntary classes in such a subject can be successfully formed. For pupils who will have enthusiasm for the study of a foreign language (and there are many such in every part of the land) the other old-time studies of the seventh and eighth grades can be slighted or even entirely neglected without loss, provided they be replaced by new ones which yield a richer content and offer to the aspiring pupil broader outlooks upon life. For the continuations and repetitions of the traditional grammar-school tasks, in these last two years, have slight educational value, either in discipline or content of knowledge, and are peculiarly deadening to alert minds. And let it be confessed that it is for the alert minds that we are expecting to offer these new opportunities, equal chances with the dullards to whose mental capacity our public-school system is so well adapted.

As soon as it is fully realized that boys and girls in their "teens" were meant to evolve into differing shapes and sizes and will surely face differing futures in a very complex society, which needs one spirit but many gifts of mind and body, the cast-iron prescription for youth, even in the upper grammar grades, will cease.

Let it be granted that social well-being and progress demand that all normally constituted adolescents in our charge be kept for a while in self-active contact with the typical forms of national and race experience, with the mathematical way of looking at the world, with the explanations of science and its habits of making phenomena intelligible, with the interpretations of history and its call to activity in human affairs, with the workaday performances of brain-guided hands, with the artistic reading of all that is and ought to be, and with the effective expression—in different tongues—of what man thinks and feels; herein lies the province of prescription, the common group of constants. But no less imperative is the recognition of individual bents and vocational exigencies from the seventh grade forward; here is the province of choice, of individual variations, which will naturally take two directions—onward along one or more of the through lines toward a profession, outward along one of the shorter branch lines toward a vocation. Our promising search for a unified eight-year programme, however, a programme embodying the golden mean between prescription and election, will be practically futile unless we bear in mind two closely related facts: (1) That the student who concentrates narrowly thereby makes a revision of his first choice harder with each succeeding year, and (2) that no practicable device is in sight whereby the higher grades of the school system could duplicate *all* of the opportunities offered in the lower grades.

Some duplication at the several stages of transition is necessary. A group of constants with a zone of variables necessitates some dovetailing of upper grammar and high-school grades, of upper high-school and lower-division college subjects. The constants of the last two years of the grammar school, such as English, elementary mathematics, and nature study, interlocked with geography and history, must lead over to more advanced courses in

the same subjects. But if the optional studies are, say, agriculture and a foreign language, both must reappear *de novo* in the high school with only such modifications as increasing maturity requires. How to plan in detail is, of course, a matter of local adaptation. So is, within limits, the question as to whether the subject or subjects not chosen at an earlier time may remain elective or should be obligatory later on. In some cases, doubtless, students will have to pay a price for having changed their minds, but better that than barred gates. As for the closing years of the secondary-school period—if normally chemistry and physics should be taken in the eleventh and twelfth grades, why should this be the last chance for beginning? Granted that Latin is prerequisite to adequate university specialization in languages, literature, history, philosophy, and law; and that, on other grounds, it should be begun as early as possible; why should not the repentant prodigal be welcomed back to Latin in the thirteenth and fourteenth grades?

It is considerations like the foregoing that underlie the recent attempts at unification made by the University of California, and account for the transfer of the day of final judgment from the beginning of the Freshman to the end of the Sophomore year.

III

In order to show what steps have been taken at the University of California during the past sixteen years toward a solution of its end of the problem under discussion and also by what considerations and principles it has been guided, permit us now to recite a chapter of unwritten history.

In 1883 the University of Michigan introduced for its non-technical departments what was known there as the "university system." A Junior student electing to work in accordance with its provisions was required to choose by the beginning of his Junior year one major subject and two minor subjects, to plan his schedule of studies accordingly, and to submit, a year and a half or two years later, to a final examination on the whole ground covered, an examination set by a committee of three, representing the candidate's major and minors. After a few years' trial this method of obtaining the Bachelor's degree of general culture was discontinued for various reasons, one of them being that neither students nor faculty were ready for so radical a departure from established tradition, and another the burden of administering individual final examinations.

The conception of university development, however, that had inspired the movement at Ann Arbor was carried literally and bodily to the University of California. This fact accounts largely for a reorganization of undergraduate courses which took place in 1892. Its main features were the following:

1. The retention of the traditional framework of a four-year course leading to a Bachelor's degree. This meant the definitive rejection of the proposal to shorten the course to three years.
2. The recognition of the middle of the course as a suitable point for turning from chiefly cultural or man-centered aims to progressively professional or work-centered aims. This meant the rejection, on the one hand, of the idea that university work in the narrower, in the German, sense should be postponed until

after graduation, and, on the other hand, of the position that high-school training is educationally sufficient for university specialization. As indicated in the register of 1893 and stated more fully elsewhere, this step implied a modernization of the old theory of liberal culture in that it emphasized not only the assimilation of the best our civilization has to offer, but also training for definite social efficiency and service through the methods of modern scholarship and its applications. It was seen further by the committee, that the work of the first two years would come to be regarded as the continuation and partial culmination of secondary education; while the last two years, without abandoning the purpose of general culture, would lead over without a break into the more strictly professional work following the Bachelor's degree.

Viewed from the outside, the main feature of this reorganization of 1892 was an adaptation, not of the abandoned Michigan plan, but of the Johns Hopkins group system. Beginning normally with the Junior year, each candidate for a degree was required to devote about half of his time to a more or less coherent group of advanced studies in not more than two departments, this group to embody the university idea as just defined. The other half of his time might be given to informational and inspirational courses provided for in the various departments, in the interest of many-sided self-development.

On this foundation the university has built since then, too fast, of course, for college Tories, too slowly to suit the university Whigs. One of the first-fruits of the discussions accompanying and following our reorganization was the definite purpose in the minds of the leading spirits to encourage the ultimate establishment, in the more populous centers of the state, of six-year high schools, which should prepare their graduates for the Junior year of the university and otherwise extend educational advantages, thereby opening the way for the university to concentrate on Junior, Senior, and Graduate studies, without, however, surrendering its Freshman and Sophomore classes. This seemed a dream, though a logical one, at a time when most of our present high schools had not come into being, while most of those then existing were kept busy adding a fourth year. Nevertheless, this purpose has never been lost sight of since the middle of the nineties. It was with this in the background that the university made successive agreements with the colleges of the state to admit to Junior standing students who should come from these institutions with two years of college work, i. e., six years of secondary training, to their credit. It was in accord with this policy that the university cordially seconded Doctor Millspaugh's endeavor to establish at the Los Angeles Normal School courses paralleling those of our Freshman and Sophomore grades. Naturally, therefore, it gave great satisfaction at the university when the last legislature passed the Caminetti Bill authorizing communities to add a top-story of two years to the present four-year high school.

Meanwhile it had come to seem desirable and possible to develop further the plan of 1892. Accordingly, a second revision of the undergraduate curricula was undertaken and made effective. This provided: (1) for greater freedom in dovetailing the upper end of the four-year course and the lower end of such professional courses as those of law and medicine; (2) for a more definite, sharply marked separation of the last two years, the upper division, from the first two years, the lower division; (3) for a Junior Certificate to be given on the

completion of six years of combined high-school and college work or its equivalent, and to serve as admission card to the upper division; and (4) for an irreducible minimum of four semesters, as the time to be spent in the upper division for a degree, thus making the possibility of shortening the combined secondary and university course to depend on the time required by the individual student for the Junior certificate. Moreover, while the committee did not deal with admission requirements, the adjustments in the prescribed college studies of the first two years were made deliberately with a view to promoting a unified six-year course, to unstiffening the barrier between the twelfth grade and the thirteenth grade, and to facilitating transfers from one group of departments to another according to the student's change of purpose.

Thus far this process of evolution had involved the so-called colleges of general culture alone. But the changes seemed so sound theoretically and worked so well, while the need of correlating the high schools and the state university and the further need of correlating the parts of the university with one another became daily more apparent and pressing, that in 1907, after much informal discussion, a third committee was appointed charged with the duty of proposing plans whereby the principles of correlation, unification, and overlapping of programmes could be made applicable to the whole university. This committee soon convinced itself that the high-school aspect of the problem of unification could not be solved satisfactorily as long as the technical colleges with their necessarily more or less rigid sequences of study were based directly on the four-year high school. This conviction, as well as general educational considerations, led to the working out of the Junior Certificate idea for the technical colleges as it had been worked out for the colleges of general culture. In doing so, we determined first a group, one group, of type-constants—English, mathematics, foreign language, history, and the natural sciences—on a six-year basis, with such dovetailing of the upper end of the high school and our lower division as to leave the student free to complete one or more of the subjects required for the Junior Certificate either in the high school or in the lower division of the university and to set the high school free to emphasize any of these subjects or types of subjects without any necessary reference whatever to the prospective university students of law, or medicine, or commerce, or agriculture, or engineering, or the science and art of teaching, or of the pure scholastic branches. The committee then determined how the student would have to use his range of options in order to prepare himself, according to his preference, for the various routes beyond the Junior Certificate. Special regard was paid to coöordinating and harmonizing the differentiated approaches to university specialization so that the student might continue his voyage of self-discovery as long as possible, without paying an exorbitant price in time and youth for a change of mind. In the hope that students might come to look upon the Junior Certificate as a six-year high-school diploma, standing for a completed general-culture course and marking a good stopping-place, it was further provided that students not able or willing to graduate from the upper division might get the certificate without having made connection by way of their electives with the work of the last two years. Now, this pushing-up of all

departments to the Junior Certificate plane presupposed, of course, the lengthening of some of the technical courses. For the engineering colleges, for example, it meant that three years would have to be required in addition to the two years of the lower division. To make the extra year compulsory seemed impracticable until such time as the western universities generally could agree to take this step. The best the committee could do was to propose optional five-year courses and to let the old four-year plan continue as an alternative for the present. It would then rest with the high schools whether they would shape their programmes with reference to one or the other alternative. What to work for, however, came to stand out very plainly. It was, in the first place, to make throughout the university the foundation for the various professions an integral part of the upper division programmes, with the proviso, however, that each student shall have time for courses of the old-time college stamp and purpose. It was, in the second place, to relegate the narrowly professional training in special processes and technique to the year or years following the bachelor's degree. It was, in the third place, to devise such undergraduate courses preparatory to a profession and to adopt such methods of teaching them that, while each course leads over directly to the technical graduate training, it remains so man-centered in aim and so interpretive of the world's work that the student who does not look forward to the corresponding specific calling will find the course illuminating and truly "practical."

The report of the committee was adopted last spring and we are working under its provisions. As the last announcement of university courses shows, we have now a unified six-year secondary course and this is linked everywhere to the university work of the upper division. The ratio of prescribed constants to electives is a matter of detail, to be adjusted as further insight and wisdom come to high-school and university men. We have now well unified the upper division by tearing down as many as possible of the partitions between the colleges of general culture and those of applied sciences and commerce and have in most departments applied the principles above mentioned for uniting organically undergraduate-cultural and graduate-professional training.

The problem of correlation and unification as it has presented itself in the university has all the elements of the same problem as it presents itself to grammar school and high-school teachers and therefore the principles and devices which we find workable must be workable along the whole length and breadth of the school system. The starting-point, or basis, must be everywhere a core of constants and a zone of variables, the former in the interest of a socializing education and of continuity, the latter in the interest of an individualizing education and of vocational aims. Next comes the device of dovetailing or partial overlapping of programmes, so that certain opportunities are offered in each of any two parts of the system to be articulated. Lastly, introductory vocational courses must be so organized that they are on the one hand truly man-making and on the other hand of such a character that technical training may be made to grow out of them as the branches of a tree grow out of its bole.

IV

In the recasting of our school system for the purpose of embodying the principles of unification and correlation herein set forth, the emphasis falls upon the following fundamental elements of the problem:

1. The external form of school organization, artificial as it is, need not be disturbed. The changes in method of teaching, in subjects taught, and in aims sought for, may all be made internally without reference to the arbitrary classifications of pupils.
2. The introduction of new subjects and of the principle of election in the seventh and eighth grades demands more highly trained teachers than those at present assigned to the work of those grades and involves some additional expense, which many smaller communities cannot be expected to meet.
3. The overlapping of programmes at convenient intervals of about two years, at the beginning, middle, and end of the high-school period and at the beginning of the Junior year in college, provides the means for quick adaptations of elective opportunities to the needs of individual students.
4. The adjustment of special programmes of study to the needs of different classes of students, destined for different goals ahead, calls for careful attention, and doubtless university experience will be required in solving this part of the problem.
5. The professional school, whatever its character may be, must not be allowed to break the essential continuity and the rational sequence of secondary educational development.
6. The open door for the introduction of foreign languages in the seventh and eighth grades removes the chief difficulty in the pathway of the student who, starting fresh at the seventh grade, must prepare himself adequately for the beginning of professional study within the minimum time of about eight or nine years. This time-saving device will bring the student to the completion of studies for the profession of law, or medicine, at the age of about twenty-four.
7. Finally, and this consideration is of utmost importance, when the links of the chain that are as yet missing at the end of the grammar-school period have been welded, uninterrupted progress from boyhood to efficient manhood, will have been provided for in our system of education.

DISCUSSION OF THE REORGANIZATION OF SCHOOL SYSTEMS

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. STRATTON: I wish to express my regret that Professor Stringham and Professor Lange, who are the authors of the paper, cannot be here to defend it, or to explain any of the matters that may seem to you in need of explanation.

MR. NORTHRUP: In proposing to convert the lower two years of college work into high-school work, or at least to have it done in high schools, is it because it is supposed that the high schools can do the work better than the universities—that the work would be better done—is that the idea?

MR. STRATTON: I suppose it is partly that, and also the idea that the university, by centering its forces on work that has a more unitary character, can perform its own peculiar duties more efficiently.

MR. NORTHRUP: Why should the high schools be able to do the work better than the universities? It seems to me that the universities ought to be enabled to do better work than high schools, on the subjects.

MR. STRATTON: The manner of teaching in the lower division of our college course is more kindred to the method used in the high school than to that used in the upper division of the university. It is not proposed to lower the character of the instruction in any wise, nor to prevent the subjects transferred to the high school from being taught in the university also, according to university methods.

MR. NORTHRUP: I supposed they were to be college subjects. I assume one might suppose that, as it is part of the four-year course, isn't it?

MR. STRATTON: They are "college subjects" under the present arrangement. But to re-group them as "secondary" studies, besides offering advantages of method and of increased maturity in our university life, would also be more economical as far as university administration is concerned.

MR. NORTHRUP: But suppose you are looking at a state as a whole; is it more economical to establish high schools, instead of having that same work done by the somewhat larger faculty that would be otherwise necessary, by the university? In most of the high schools the classes would be small, the expenditure of preparing teachers would be greatly increased beyond the expenditure required to make your university all that it ought to be; and in addition to that, the work of training in high schools today is not done any too well for four years; and until it is done as it ought to be for four years, I should strongly object to seeing six years, two of them higher than the present work, going to the high schools. I don't believe that the project is in the interest of improved education and higher culture. I think it is in the direction of thinning, separating, extending, but not deepening economics or culture. But I may be entirely wrong. I am stating the case just as it occurs to me.

MR. VAN HISE: In Wisconsin, so far as we have moved in this direction, it has been along other lines than that of attempting to get the high schools to give the two additional years. We have done the same thing that has been done in California, in coöperation with colleges. We have made arrangements with all the colleges of the state that are qualified to do the work, to receive their work for the first two years, and so advance the students two years before they enter the university. Also, we have made arrangements with the normal schools by which we accept their work so far as we can; and we have proposed to the normal schools that an arrangement be made by which they undertake two full years of the A.B. work. In this way we had expected, with our seven normal schools and our half-dozen colleges, to get a large part of this first two-years' work done, and so reduce the demands upon the university for doing the first two-years' work. Already we have accomplished something in that direction; so that now a larger proportion of our students are entering with advanced standing, a considerable portion of these students taking the work of the first two years at colleges and the normal schools. We have looked forward as the next step in this direction, to the larger cities, with the hope that in Milwaukee, Racine, and some of the larger cities municipal schools would be maintained which would provide the first two-years' work. I should not suppose it was advisable or practicable to urge the larger number of the high schools of the state to attempt these two-years' work. There would be an unnecessary number of schools to do that work; and I think that President Northrop's criticism is correct if it applies to the idea generally of adding two years to the high school. But I can see no reason why Milwaukee, for instance, might not make at least one of its four high schools a six-year high-school course, and

so enable the students who come from Milwaukee to the university to gain two years of the college course before coming up to the university and thus really save expense. For this matter of expense we must look at from two points of view; not only the expense of the actual education, but the expense to those who participate in the education. And if the boys and girls can live at home for two years and have good training, their expense certainly is very greatly decreased. And, therefore, the matter of expense really for the whole public system of education involves these two elements. We, however, probably in state universities shall be obliged to maintain for a long time our first two years, for the reason that only a few schools—those most favorably located—could undertake to do the first two years of this work; and of the two or three hundred schools which prepare for the university in each of the larger states probably not more than one-tenth for a long time to come ought to attempt to do two years of college work. It may be that when this system somewhat develops, and we have a few good schools having the first two-years' college work, we can induce the students to go to these secondary schools and get the first two years, so that ultimately we may be able to drop the first two years in the university.

MR. STRATTON (in reply to a question): The state of California contributes to the support of the high schools.

MR. NORTHRUP: In Minnesota the state gives \$1,500 to the high school. If the university were going to drop the two lower classes entirely it would save something, of course. It seems to me it is a good deal a question of names. If Milwaukee would extend its high school and make a college of it, Milwaukee would have what it apparently wants. But smaller places cannot do that and for most high schools four years of work is enough.

MR. CROTHERS: In answer to President Northrop, I think that there are reasons for eliminating the lower division of the college work, sometimes designated as the junior college work, from the environment of the university proper. I think the advantages accrue largely to the university. The educational spirit and methods to be followed and encouraged in the lower division are different, properly so; the method of instruction is properly different; the discipline is, or should be, different. But this is impossible where the students of the upper division, and of the graduate department and professional departments are confused with the students of the lower division. The matter of immaturity should also be considered, both from the standpoint of discipline and from the standpoint of the advantages to a student in living at home while doing the early academic part of his work. Leland Stanford University is coöperating with the University of California, although acting independently and without any pre-determined arrangements, in recognizing the junior college work of some of our smaller colleges and of one or two of the high schools which are preparing themselves to do this work. At present we have applications from three high schools in California for recognition of their graduate or junior college work, which must be given, as I understand it, by a separate faculty and with adequate facilities. Of these three we decided to recognize one at present, if, upon examination, it is found to be doing satisfactory work. We have deferred consideration of the other two for the present, so that we are going slowly, but, we believe, surely. Many of the high schools of the leading cities of California, and of the leading cities of the country as a whole, will maintain collegiate courses which in every respect will be equal to the collegiate courses at present maintained in the vast majority of colleges, and we believe it to be to the interest of the student to go to those schools while living at home, or in the neighborhood of home, rather than to come to the university. But we are interested in this at Stanford primarily from the stand-

point of the University. It may be quite different in large cities, but in an isolated community it is almost impossible to maintain university ideals in the presence of the lower classes. I think that the lower division also suffers from premature contact with the university methods and ideals. If we had the junior college students eliminated we could more readily maintain a freer system of discipline.

I may add, relative to the California high schools, although this applies to our high schools as a whole, and without any special reference to this subject, that under our law the two universities have virtual control over the certification of high-school teachers in California. It is the only state in the union where the high-school teachers must not only be college graduates, but they must have one year of post-graduate work, in one of the members of this Association, and that virtually means that they must have the recommendation of Stanford or the University of California before they can be certified, or take examinations for certification. Through this regulation our high schools will be able to raise their standards in the future, under the guidance of the universities.

MR. FINE: If the city high schools can provide satisfactory instruction in the subjects now occupying the first two years of the college course, there is no reason why the universities should not admit such high-school graduates as have done this advanced work to the Junior class. Furthermore if the residents of our cities prefer to be taxed to provide this instruction in order that their children may be saved two years at the university, there is no reason why they should not have their way in the matter. But in the paper under discussion it is urged that it would be to the advantage of the higher education were this work to be taken from the university and relegated to the schools. To this proposition I cannot give my assent. In the first place, such an arrangement would be to the disadvantage of the student. For one thing, he would not be as well taught. For another, the Freshmen and Sophomores in our colleges are greatly benefited by their association with the upper-classmen. Were they to be separated from this association and left in the high school in association with students less mature than themselves, they would miss a very valuable part of the training given by the college life. In the second place the arrangement would have an unfortunate effect on our university faculties. The effect of removing this large body of students from the university and scattering them among the high schools would be greatly to weaken in the university the departments of instruction in all those subjects which are at present taught in whole or in part to underclassmen. Corresponding to the great reduction in the number of men to be taught there would be a reduction in the number of professors and instructors. No one who has been a member of a college community needs to be told that there is more to stimulate intellectual life in a large department, if well manned and organized, than in a small one. In the case of the large department there is a better chance that the members will find that intellectual companionship, that sympathetic interest and friendly criticism which count for so much in keeping a man, especially a young one, active in his scientific work.

In these days when the supply of young men of the best talent willing to teach or to devote themselves to science or letters is not sufficient to meet the demand, there is special need of economy in the use of the men we have. We cannot have good instruction unless we have able teachers, and our limited supply of teachers competent to do the work of the first two college years can surely accomplish more in the way of giving instruction if gathered at the universities, than if scattered among the high schools. And the men themselves are more likely to keep alive intellectually and develop in the university environment than in that of the school.

I am inclined to think, therefore, that so far as the interests of the higher education are concerned more would be lost than gained by separating the work of the first two college years from our universities and relegating it to the schools.

MR. STRATTON: The plan, however, may have in it a large economy after all—an economy of the student's time and energy, and at no sacrifice of solidity of preparation, but rather the reverse. The earlier introduction of modern languages, for example, would certainly contribute toward this important end.

MR. HILL: One point in the paper which has not been referred to in the discussion, and which, it seems to me, is likely to become important in the near future, refers to the possibility of shortening the period of elementary education. We university men have been giving much attention to the high-school curricula of four years, and we are now discussing the feasibility of extending that to six years so as to eliminate the first two years from the college course. In my judgment the elementary work in the colleges could be eliminated if we would eliminate first a year or more from the grades and thus permit the high school to take the pupil earlier and, by lengthening the course to a corresponding extent, keep him till the present age for college entrance.

Supposing we take the curriculum in the grade schools of Ithaca. We will find practically nothing in the eighth grade that is not a review of what has been gone over in the sixth and seventh. Even the pupils in the seventh grade spend most of their time in studying the same subjects they were taught in the sixth, but they use fuller and more difficult texts in the seventh. This is not only to a great extent waste of time, but it is deadening in its influence on the pupil's interest and curiosity. We certainly need to reduce the number of students pursuing elementary courses in our universities if there is to be developed a real university spirit within them, but the extension of the high school should probably be downward rather than upward, as the best means of accomplishing this result, for our students at eighteen are mature enough in years to begin university work.

It has been remarked by one speaker that all the work done in the universities is at least college work and not high-school work. For my part, I cannot see that beginner's French or German is college work at all. It is no more college work than beginner's Latin. Under present conditions bright pupils can shorten the course and enter college at sixteen, though the age planned for by the school system is eighteen. Let the work of the system be so arranged that the bright student will require the normal number of years, and let the dull ones take more time. If that were done, we could hope to have bright youth of eighteen entering the universities with a training that would enable us to eliminate elementary drill courses from our curricula and give us a chance to work out university ideals.

MR. HADLEY: Nearly every state in the Union now has a child-labor law. During the period in which child labor is prohibited all the children must be sent to school. After that period has terminated only a minority will go to school. This therefore furnishes the natural point of separation between the grammar school and the high school. If you end the grammar-school course at an earlier period than this, you send a number of children into the high school for one or two years and then take them out before they have had the chance to get the good of it. This is uneconomical and demoralizing. Theories about "adolescence" do no harm as long as they remain within the domain of mere talk; but it is the facts regarding the child-labor law, rather than the very doubtful theories concerning adolescence, which determine the point at which this break should be made.

With regard to the point at which the passage should be made from high school to college, the question is more doubtful. If the high schools in any given city wished to add two more years to their courses, we certainly should not discourage them from doing so. They can doubtless meet in this way the educational needs of a number of pupils who cannot easily go to college. But if we are asked to take one step farther, and rely on high schools to do the first two years of college work, the objection is that it will be uneconomical and bad for the pupils. It will be uneconomical, because it is more costly to do work of this sort in a great many places than in a few. It will be bad for the pupil, because two years of culture-study in a new place intercalated at this point in his education prove demoralizing rather than helpful. He does not stay long enough in his place to get his ethical influences and standards; and in the absence of these influences these two years, for the great majority of men, prove to be worse than wasted.

It is an open question whether fifty or a hundred years hence all our high schools will lengthen their courses and all our universities abolish their colleges. That is a wholly different thing from the matter now under discussion. But to make the time of passage from high school to college two years later than it now is, and then to expect the students to take two years of general culture-study before beginning specific professional work, seems to me quite out of the question.

MR. BALDWIN: I rise simply to indorse Dr. Hadley's remarks. In our college at Johns Hopkins, as possibly all of you know, two years ago we added the fourth year to the college curriculum, which before that had been three years. And while that seemed a very revolutionary step, it was required, for the experiment had failed of endeavoring to get students prepared for the Sophomore year. I feel that the line in the future between the college and the university is going to be just about the end of the Sophomore year; that the old college curriculum will probably fall to pieces, the work of the Junior and Senior years going over to the professional school. It is perfectly evident, however, that not many of our localities are ready for it as yet.

MR. ELIOT: I have listened with great pleasure to the paper that was read on behalf of the University of California. It seems to me to promise a very good thing; that is, the mixing up of all the boundaries which we now lay down and try to enforce between the different grades of education. In the first place, the present boundary between the grammar school and the high school; that is an abominable boundary. It has worked great mischief, because it has prevented the great mass of our children from beginning the study of the languages in the grammar schools. The high schools have seized upon the modern languages as their property, their ground. Everybody knows that the right age to begin the study of a modern language is at eight years at the latest. The European practice begins earlier. This report proposes that some foreign languages be put into the last two years of the grammar school. That in my judgment is an admirable mix-up. In the next place, this same paper proposes to break up the existing boundary between the high school, or the preparatory school, and the college, by introducing elective work into the secondary school, the high school. There again, this paper promises a great gain in American education. At Harvard, where the entire work of the college is elective from the very beginning, and a Freshman has his choice amid a great variety of courses, we have succeeded in mixing up this boundary between the secondary school and the college. It used to be thought that everybody should begin the study of Latin four or five years before he came to college, and the study of Greek two years before he came to college. In Harvard College we have a class for beginners in Greek, and elementary courses in Latin. Why? Because a certain number of admirable students whose tendencies are to language, come to Harvard

without having had any opportunity of studying Greek, and they want to study it. To our thinking, there is no reason whatever why the college should not teach the elements of Greek. In John Adams' time Hebrew was a subject taught in secondary schools; now it is rarely taught in colleges. It is just so with regard to science. From some of our best preparatory schools in New England young men come to Harvard College from eighteen to nineteen years of age who really have had no training in any science; and these students must begin in college with elementary science. We thereby render those men great service, and we see no loss of dignity in the college at all. The real dividing line between the secondary school and the college, is the nature of the discipline. The whole mode of life and the discipline differ in a high school or a preparatory school, and in the college. At Cambridge the discipline is different from that of the secondary schools. That difference in discipline depends in part upon the difference in age between the student and the schoolboy. But it is impossible to fix an age for admission to a college, because young men differ so enormously in their maturity at a given age—we will say eighteen. One boy is more mature at fifteen than another is at twenty. And this diversity runs right on through young manhood. One person is more mature at twenty-one than another is at twenty-six. And this difference of maturity and mental power appears in all the biographies of men whose lives have been worth writing. So we have several proposals in this paper which tend to break down the fixed barriers between one class of American educational institutions and another.

Looking forward it seems to me pretty clear that the American secondary school is going to improve very much within the next twenty years. And this paper mentions the chief line of improvement, namely, the improvement of the teacher. That is our real difficulty in American grammar schools and modern high schools; it is the poor quality of the teacher—not universal of course, but very general. And we shall not get in colleges what we want from the preparatory schools till the quality of the teachers in the schools is considerably raised. We are all of us trying to improve the quality of the teacher, because we prepare many of the teachers for both secondary schools and colleges. And, therefore, we appreciate very much the various efforts in our different universities to give special teaching in methods. We are improving very much in that direction, and we have much to hope for in the line of raising the quality of the teacher in the preparatory school. We are threatened at various points of the country with impairment. And one of the points at which we are threatened is the continual substitution of women for men in our American schools. That is a very unfortunate tendency which we ought all of us to resist. I look forward hopefully, therefore, to the trial of these proposed experiments; but the directions of my agreeable anticipations are somewhat different from those which appear in the paper itself, because the paper itself seems to advocate a pretty stiff organization, instead of a breaking down of barriers; and I should hope that experience might show that the really profitable direction of labor was in the abolition rather than in the creation of a stiff frame with gates, at the end of the grammar, at the end of the high, and at the step between the college and the university. As to that latter gate, which seems to interest the American people so much, the division between the college and the university, it seems to me that we shall not get clear ideas on that subject until we make it the division that we were talking about this morning—the college, the place where the preliminary or first degree is obtained; the university, the place which in all its branches requires the possession of the first degree at entrance. There is the clear line of division, and I hardly think we shall get a clear line until we reach that particular line of division—not to be

looked for within ten years perhaps, and yet sure to come, and sooner than the older men among us have anticipated. Already much has been done in different cities and towns of the United States to show that there is a prodigious waste in the grammar school and the high school. I will cite as an illustration, an experience in my own city, in Cambridge, in the public schools. The superintendent of schools, after a very long term of service, devised a plan for carrying children through the grammar school, which had a period of six years, in either four years or six years. This plan has worked admirably. It has now been in operation at least ten years; and we have had plenty of time to prove that the children who go through Cambridge grammar schools in four years do better in Cambridge secondary schools than any other children. They do, of course, better in the high schools than those children who took six years in the grammar school. That illustrates what is possible within the present somewhat rigid framework; and it also illustrates the immense diversity in the capacity of children in the upper classes in grammar schools. And I feel that the thing to be sought for at every turn is freedom for the brighter pupils to go fast, and not be held back by the dullards. That is what we want, more freedom for the individual. And we want it because the capacities of the individual children are so widely different that we must have in the public-school system and the college and university diversity for these human beings of such widely different capacities.

THIRD SESSION

THE COLLEGE IN THE UNIVERSITY

PAPER PRESENTED ON BEHALF OF CORNELL UNIVERSITY BY PROFESSOR WALTER F. WILLCOX

The relation of the former capstone of our educational system and perhaps our most distinctive educational institution—the American college—to the American university is one of the most difficult and pressing questions of higher education. In a way more or less indirect it has come before several preceding conferences of this Association, and among the subjects proposed by the universities represented on the Executive Committee for discussion at the present session there are three which bear directly upon that topic. These three are:

1. The threatened destruction of the American college through the process of counting one course of instruction for two degrees.
2. The differentiation of the American university from the college by relegating the present Freshman and Sophomore years entirely to collegiate institutions, confining the university to professional, technical, and research work.
3. A college curriculum for Freshmen and Sophomores.

It has been suggested that these subjects are closely related and I have been asked to present a paper upon "The College in the University." The subject is so vast and many-sided that I have made no attempt to treat it as a whole but have in the main confined myself to certain aspects where, if anywhere, my experience and my special line of work warrant the hope that my conclusions may deserve discussion by this conference.

The relations between college and university differ widely in the different institutions composing the Association. In some the college was for many decades all or nearly all there was of the institution and the atmosphere and traditions then produced are still potent or dominant; in others the college is a somewhat artificial creation contemporary or later in origin than the university. One's judgment regarding the nature and ideals of the American college and its significance for the educational needs of the present and the immediate future is inevitably affected by these differences of educational tradition and experience. We may assume, therefore, that no agreement will be reached and perhaps admit, as I do, that diversity in such a matter is healthy and advantageous. In dealing with the topic our conference can do nothing more and nothing better than to elicit a frank interchange of experience and of theories in the hope that some light may be thrown thereby upon the local or peculiar problems of the several institutions.

The subject of the evening may be approached by a brief consideration of the American college, which has been in the country as a whole the precursor, and in several institutions the basis and foundation, of the university. At the start a definition of a college must be ventured. But a definition, like a statistical average, is never intrinsically good or bad; it is always to be judged with reference to the purpose in view. Thus the definition of an American college recently adopted by the Carnegie Foundation for the Advancement of Teaching, based upon that in the statutes of this state but adding to the specifications found in the law the requirement of "a productive endowment of not less than two hundred thousand dollars," is doubtless satisfactory for the purposes for which it is intended but is not so well adapted to a discussion like the present. A legislature or a Carnegie Foundation must define a college with exclusive regard to its characteristics at the present time and place but in considering the complex relations of college and university the future is more important than the present and changes which have occurred in the past are our main clue to what the future is to be. A statement of what the American college ought to be would help far more than a statement of what it is. For some such definition we naturally turn to those institutions in which the college has had its longest and most vigorous life and I have found none better than one adopted by the President of our oldest university, who honors the Association tonight by his presence, from the exposition of President Hadley and expressed in the discussion before this Association six years ago. Mr. Eliot then said: "President Hadley recently gave an admirable definition of what we wanted the college to effect—to teach the college youth civic duty and religious earnestness and breadth of mind and aspiration; to teach him public service as the root of American life and therefore of American education." But he went on to indicate that in his judgment these aims were not peculiar to the college by adding, "That is the educational gospel not of the American college only but of American education from the primary school through the professional school." In his recent book on *University Administration* another suggestion for a definition is made: "When the American university is properly organized it will become clear to the public that a college is a place of training for the first degree in arts or

sciences obtainable at about twenty-one years of age." This opinion regarding the desirable age of graduation from college receives weighty support from Mr. Pritchett who says in a recent article: "In the reorganization which will sooner or later come, the college years seem to me likely to be those between sixteen and twenty rather than between eighteen and twenty-two," and the importance both authorities attach to this point is sufficiently indicated by Mr. Eliot's reference to it in the same discussion as "the most difficult point in American education" and by Mr. Pritchett's statement in another article that "the determination of the functions of the college itself and its future is contained in the inquiry whether the boy shall enter college at sixteen or at eighteen."

This question, Is the age at entering college likely to be materially reduced? must be considered then before we can go farther. So far as I have been able to learn there is no source of information regarding the universities of the country as a whole or the universities in this Association which shows the changes in the recent past or the present trend. May I interject here that the admirable example set for many years by Harvard University in giving complete information every five years regarding the specific ages of students at entrance is worthy of imitation? Being unable to find any information for the universities as a group I turn first to the evidence from the colleges as a group and will then recur to that from the single universities. Since this subject was last before our Association a question closely related to that of age at entrance but not identical with it—the age at graduation—has been studied by Professor W. Scott Thomas¹ who claims to have utilized all accessible alumni catalogues giving the date of birth as well as the date of graduation of the alumni. This information he has found for eleven colleges, namely, Bowdoin, Dartmouth, Middlebury, the University of Vermont, Wesleyan, New York University, Syracuse, Adelbert, Oberlin, De Pauw, and the University of Alabama. In the tables for coeducational institutions only the men are included and in all tables only alumni receiving the degrees of A.B., Ph.B., or B.S. (except in Dartmouth College where the graduates of the Chandler Scientific School are omitted). The results are averaged by decades for the last half of the nineteenth century, the number of alumni being about two thousand in the first decade and thirty-five hundred in the last. The figures show a very slight and irregular increase in the average age at graduation—from 23 years, 3 months, in 1850–59 to 23 years, 6.1 months, in 1890–99. But if the median rather than the average age is computed, and this seems to me the better test, there has been no change at all for these eleven institutions as a group during the past forty years. In some of them the median age has risen; in others it has fallen. In only three of the eleven was the age at graduation higher in 1890–99 than it was in any preceding decade; in three others it attained its maximum in the decade 1860–69. The most important change revealed by the figures is the increase in the uniformity of age among graduates. The proportion graduating at 18 and 19 has sharply decreased but so too has the proportion graduating at 25 and over, the two changes just about offsetting each other.

¹ See W. Scott Thomas, "Changes in the Age of College Graduation," *Popular Science Monthly*, Vol. LXIII, pp. 159–71.

Turning now to the evidence from the universities composing this Association, I have some material from Columbia, Harvard, Yale, and Cornell.

Regarding Columbia President Butler stated in his first Annual Report, "Since 1880 the average age of the students entering Columbia College has increased exactly one year and while no adequate statistics for 1860 are available it appears to be true that the average age of admission in 1880 was one full year higher than in 1860. The Registrar has made a careful examination of the official records and reports that in Columbia College we are demanding two years more of time and work than was required in 1880." The report of Dean Van Amringe in the same volume refers also to the statistics of ages of Freshmen in the Registrar's report but I have been unable to find the table or any further information regarding the ages of entering students. If a statement in President Barnard's report for 1886, giving the average age at entrance to Columbia College in October, 1865, be accepted as correct and typical, the average age of entrance at that date was 16 years and 11 months and the increase in 40 years has been about 18 months.

The figures of Harvard College are refreshing in their detail and accuracy. The tables go back to 1856, but in order to facilitate comparisons with the figures for Yale and Columbia, which do not go back of 1863 and 1860 respectively, I confine myself to the last four decades of the century. The average age at entrance to Harvard College for these periods was:

| Decade | Average Age at Entrance | Increase in Ten Years |
|--------------|-------------------------|-----------------------|
| 1860-69..... | 18 years, 4.2 months | |
| 1870-79..... | 18 years, 7.7 months | 3.5 months |
| 1880-89..... | 19 years, 1.0 month | 5.3 months |
| 1890-99..... | 19 years, 1.7 months | 0.7 month |

or a total increase in 30 years of 9.5 months. But this statement needs some qualifications. The average may be affected by a few persons of high age. In the first score of years not one person over 30 years of age entered Harvard College, while in the second score of years 30 such persons entered. To prevent this group from exerting undue influence I have computed the medians for these decades. This reduces the increase from 9.5 months to 8.8 months.

Another qualification is probably more important. It is the practice in the Harvard table, which is published every five years, to enter the age of each person who ever joined the class as if he had entered with it as a Freshman. I understand that this refers to those who enter to advanced standing from another college and also perhaps to all who return to complete the course after one or more years of absence. The figures show that this group average considerably older than their classmates. They show also that such students constitute a much larger proportion of the class now than they did in 1875. When they are included the increase of the median age between 1875 and 1900 is 5 months; when they are excluded the increase is 3.1 months. This qualification can be applied only to every

fifth class, that is, the class which enters Harvard College in the year that the table is published, and it is uncertain just how much difference it would make if it could be applied for every class. On the basis of the evidence in hand my guess is that the median age of students entering Harvard College not to advanced standing did not increase more than six months between 1875 and 1905.

The Yale figures indicate an increase in the average age at graduation since 1863 of about four months. A comparison of the figures for Harvard, Yale, and Columbia shows that students still enter Columbia College much younger than they enter Harvard or Yale and that the difference was probably greater a generation ago than it is now. The increase in the average age at Columbia during the last thirty or forty years, which is apparently much greater than the increase at Harvard or Yale, may perhaps be interpreted as a part of the same movement which in the group of eleven colleges first mentioned is leading to a concentration on the years between 18 and 23 as the normal college years.

I will not say more about the Cornell figures than that thirty years ago the men entering our general courses averaged much older than at any one of the other three institutions and that the average age has decreased by about seven months in the past thirty years. In this case also the tendency has been to approach the normal.

The conclusion to which I am brought, that in the American college there has been no general or considerable increase in the median age at entrance or at graduation within the last thirty years, is contrary to the common belief. Possibly a few moments may be taken in suggesting how that belief arose and spread.

Before the Fourth Conference of this Association the delegate from Cornell University after reciting the average age of Freshmen at Harvard and Cornell went on:

Compare these figures with the age at which professional men now in high station graduated from college. Of the present members of the Supreme Court of the United States but one graduated from college after he was twenty-one and two graduated at seventeen. Of all those who have been appointed to that bench since 1850 but three graduated from college after they were twenty-one and one half of those who were college graduates took their degrees before they were twenty. Of the living ex-attorneys-general of the United States every one who is a college graduate took his degree before he was twenty-one. Of the ten living ex-presidents of the American Bar Association all but one of those who are college graduates took their degrees before they were twenty-two and five before they were twenty-one. These instances serve to emphasize what is, I presume, generally conceded, that down to a comparatively recent time students graduated from college from two to four years earlier in life than at present and had completed their professional studies at an age when the college graduate of today is just beginning his.

In the discussion on this paper the representative of Harvard University said:

A few years ago I assembled 200 cases of Harvard graduates between 40 and 60 years of age who had become distinctly eminent in their respective lines of life and I found that these men had entered as a rule between the ages of 16 and 17. Ten years hence it will be impossible to assemble any corresponding group.

To the same effect is the following passage in the First Annual Report of President Butler:

President Hyde of Bowdoin College has recently said that "nearly all the distinguished alumni of Bowdoin College graduated at about the present average age of entrance and were well launched on their profes-

sional careers at about the age at which our students now graduate." He cited the cases of Jacob Abbott and William Pitt Fessenden who were graduated before they were seventeen; Longfellow, who was graduated at eighteen; Franklin Pierce, John G. Andrew, Fordyce Barker, and Egbert Smyth, at nineteen; and William P. Frye and Melville W. Fuller, at twenty.

There is no challenging the facts set forth in these quotations from the representatives of Cornell, Harvard, and Columbia. There is no question that forty or more years ago many men graduated from the American college much younger than any men now graduate from college. But the inference from such instances that the average age or the median age at graduation has materially increased is far from a necessary inference. The cases cited may be cases of precocious development or cases of normal development among men of unusual power, and in no wise representative of the great mass of college graduates of their time. Mr. Butler's quotation from Mr. Hyde is the only one given in a form suitable for testing this possibility. I have compared the age at graduation of each of the nine Bowdoin alumni named by President Hyde with the median age at graduation from Bowdoin in the decade when that alumnus took his degree and find that these nine men were 2 years and 10 months below the average age of graduation in their day and at their college. Professor Thomas' figures, indeed, show that the median age at graduation from Bowdoin, 1890-99, was three months less than it was, 1860-69, and so that the actual change during the thirty years was in the opposite direction to that which President Butler sought to prove.

But if the class of very young graduates has almost disappeared and the median remained unchanged it is clear that the class of abnormally old graduates must have diminished. On this point also Mr. Thomas' figures are suggestive. We all know that the proportion of college graduates who enter the ministry has decreased but we did not know that the average age of college graduates who enter the ministry is considerably above that of their classmates. At De Pauw and Syracuse, each of which has sent fully one-fourth of its graduates into that profession, the median age of the ministers on graduation exceeds that of their classmates by more than two years. Probably also the proportion of other graduates who enter college late or whose college course is interrupted by the need to earn money has materially decreased in forty years. The evidence in hand points to two conclusions, first, that in our American colleges as a whole during the past thirty or forty years there has been no marked and general increase either in the average age at entrance or in the average age at graduation, and, secondly, that our experience during the past generation affords no sound reason for anticipating that the age of entrance is likely to be materially reduced to sixteen or seventeen years and the age of graduation to twenty or twenty-one years unless the colleges decide to shorten materially the length of residence required for that degree. At least the burden of proof seems to rest with those who believe that a radical change in the age of our students is not merely desirable but also to be expected.

If the age of students at entering the American college has undergone little change during the past thirty or forty years, as I am disposed now to believe, the argument in favor

of shortening the college course, in order to enable graduates to enter upon their careers professional or otherwise earlier in life than they now do, seems to lose some of its force.

That argument and also the one in favor of entrance to college at sixteen or seventeen sometimes neglects an important change in society as a whole, the increasing duration of human life. The life tables of Massachusetts for 1855 and for 1893-97 indicate that the average after-lifetime of a young man at the age of 20 was two years greater in the later than it was in the earlier period, 39.9 years in 1855 and 42.0 years in 1893-97. The increased length of life among college graduates is probably greater rather than less than two years. Even if our college graduate of to-day receives his degree some three months later in life than did his predecessor of fifty years ago, he still has ahead of him about one year and ten months more of life than his predecessor had.

Thus far I have presented the reasons which lead me to conclude that the college will continue for the immediate future as it has for the past fifty years to receive the majority of its students at 18 to 19 years of age and to graduate them at 22 or 23.

But it is still urged that the traditional four years in college should be reduced to three, partly because the increased efficiency of secondary schools has enabled them to do at least a full year of work which formerly was reserved to the college and partly because of the heavy and increasing demands of the professional schools. Both arguments raise very interesting and important questions. Regarding the first, Is the age standard or the attainment standard the more persistent and important in coördinating educational institutions? Has not the age standard in the past been far more unvarying than the attainment standard? Has not the development both in high school and college been in the direction of assigning to them certain years of life and letting the teachers put into those years as much and as good an education as they can? The evidence apparently points to affirmative answers. I am not averse, therefore, to any increase in the requirements for the college degree consistent with the securing of that degree at about the age now prevalent.

The position of the Harvard Faculty, as I understand it, is that in reducing the minimum period of residence for capable and industrious students from four years to three no reduction has been made in the amount of work or of attainment required. Whether similar provisions would work well at Cornell I gravely doubt. Is not this one of those adjustments which may depend upon differences in educational tradition and atmosphere? Where a university has blossomed out of a college, retaining the college traditions and ideals, with a powerful coördinating faculty and subject to the critical visitation of committees from a Board of Overseers, such a reduction in the residence requirement may be safeguarded more effectively than it can in a university which has recently and somewhat arbitrarily combined certain of its departments into a college.

Nor is my doubt a purely theoretical one. In 1885 Cornell University began a somewhat similar experiment. Before that time four years of residence and satisfactory attainments were required for the college degree. At that date students whose attainments were unusually good were allowed to enter more than the usual number of courses each year

and thus to graduate in less than four years. In course of time the test of attainment came to supersede that of length of residence almost completely. What had been intended as a reward to the minority of excellent students became practically the right of all and it was even doubtful whether our single unit in measuring attainment, namely, the hour of credit, was not changing its significance.

Another difficulty has arisen in our experience, that of accepting any sort of marking system as a common denominator applicable to measuring attainment in different departments and under different teachers. Whether the scale be one of five grades or nominally of one hundred seems immaterial. The same considerations that led our University Faculty some years ago to abandon conferring the degree of Ph.D. with predicates, a deep skepticism of the fairness of our marking system as a basis for dividing advanced students into categories according to the quality of their work, have been influential also upon our collegiate faculty. A few years ago I obtained for one term the average mark in each class including at least thirty members. There were 64 such classes in the college; in one of them the average mark was 62.4 (60 being the passing mark), in another the average mark was 90.1. This wide variation might be due to the accident of a single year as neither class was a large one. But among the ten largest classes there was one of 314 members in which the average term mark was 64.7 and another of 156 members in which that average was 75.8. Clearly the teachers who give these diverse marks interpret the scale very differently. Our faculty felt that it would be unjust to allow the attainment of such important privileges as that of graduating in three years to turn upon marks awarded with so little uniformity.

The second argument in favor of shortening the college course, the increasing demands of the professional schools, has seemed to us more convincing but has led us under our conditions to a different solution by which the two courses are allowed to overlap to the extent of one year. The reasons for this adjustment are matters of record in the official publications of the university and do not call for restatement from me.

Up to this point I have sought to give reasons for the retention of the traditional four years of college work including approximately the years between 18 and 23. Doubtless it will still be argued that 22 or 23 is far too late an age for a college graduate to enter either his professional studies or his work in the world and that the experience of other countries proves it. If these positions can be clearly established I am ready to modify my present opinion but hitherto I have failed to find any thorough and convincing series of arguments in support of them.

I now ask, How are these college years to be spent? The usual, perhaps I might say the hackneyed answer—give a liberal as distinguished from a professional or technical education, or impart culture—is so vague or carries such different meanings to different persons that it hardly helps us forward with the problem. May not three stages be discriminated in a student's educational career, the first during which he accepts uncritically what he is taught, as like his family life or his town life a part of his heritage; the second

during which the spirit of inquiry and of personal experiment is aroused and developed; the third during which some leading object or line of effort is pursued as one's life work. These three needs have created institutions to gratify them, the first the school system; the second the college; the third the university. The college then corresponds to the young man's intellectual *Wanderjähre*.

My suggestion closely resembles one made by Mr. Eliot before this conference five years ago. May I recall his words, "In the education of everyone . . . there are two stages. In the first place . . . general culture which is a sampling of the different kinds of knowledge. . . . That is the school stage. In most of our colleges it runs straight through the college. . . . When he has sampled knowledge enough to know what he is fit for, he becomes a university student. He is fit for freedom and he must have freedom." In addition to this distinction between the school, or as I would prefer to call it the college, stage and the university stage there seems to me to be another, perhaps equally important, between the stage when the boy's work is determined for him by teacher or parent and the stage in which he decides questions about his studies for himself—the college stage. For those students who enter college from a public high school, and with us at least they are the large majority, the transition to this stage is emphasized by leaving home for the first time and thus having many practical as well as educational questions thrust upon them.

Was not the object of the education in our earliest American colleges twofold, both to furnish a professional training for the ministry and also to give the student a systematic, coherent view of the world and of life and thus make him feel at home in it and help others to do the same? Was it not a fundamental reason for the supreme importance of the ministry in the esteem of most colonists that the training for this profession and for no other gave also a *Weltansicht*? With the decline in the preëminence of theology, philosophy, conceived in most cases as the handmaid of theology, became the accepted means for making the student intellectually a cosmopolitan. The preëminence of philosophy in many colleges of a generation ago and the close affinity between philosophy and theology indicate this. At the present time the purpose of college work seems to me to be more than a mere sampling of courses to help one in deciding which road to follow. It should aim to give one an idea of the unity as well as the diversity of knowledge and of life. Just at this point we reach an important question regarding a possible difference between college and university subjects.

The aim of college as distinguished from university courses should be to emphasize the unity of knowledge, the relations between one field and another, and to inspire in the student a desire to know something of related branches of knowledge at least as strong as his desire to pursue the particular subject into its more recondite mysteries. This method of treating introductory courses is perhaps more easily secured in a college apart from a university and where the departmental organization is not rigid and controlling.

Some measure of the success of the American college in training men for civic duty and public service may be found by the aid of the statistical method. The number of living

college graduates may be estimated by multiplying the number receiving degrees in any one year by the average after-lifetime. A college graduate of 22 years may expect 38 more years of life. The average annual number of college degrees conferred upon young men during the present generation cannot exceed 6,000. There are then not more than 228,000 male college graduates living in the United States today. There are about 19,500,000 males over 22 years of age who are not college graduates. The only statistical measure I have found of the performance of public service, and that I grant far from a perfect one, is the inclusion of one's name in the current issues of *Who's Who in America*. With all its defects this gives some clue to the difference between the college graduate and his fellow. Among the 228,000 living college graduates 5,815 were named in *Who's Who in America* for 1903-05: among the 19,500,000 men not college graduates 4,803 were named in that book. That is, the proportion of college graduates thus recognized is one hundred times the proportion among other men.

I do not mean that the college has caused the difference. But even the fact that it has not prevented it is evidence that the college is not so badly off as some Faint Hearts would have us believe.

It has been objected that these ratios are adequately explained by the fact that "the ablest and most energetic men have gone to college and the college has been the normal gateway to certain careers." Perhaps the objection may be met by making the comparison in geographical terms. The American college originated in New England and has attained its best development either in those states or in adjoining regions where the New England influences have been most potent. If the American college, or as it might in justice be called the New England college, has had a powerful influence in evoking and directing latent capacity for leadership and for public service then we should expect that such leadership would be most abundant where the college had been most powerful. It is significant, therefore, that when the ratios are computed between the natives of a given state mentioned in *Who's Who in America* and the total natives of that state living anywhere in the United States, and the states are ranked according to the proportion of men of mark among their natives, the New England states lead the list, the only other division of the country which sometimes outranks any of them being the anomalous District of Columbia. Stated numerically the result is as follows: Among every 100,000 natives of New England living in the United States 79 are mentioned in the latest edition of *Who's Who in America*. Compare this figure 79 with the corresponding ones for natives of New York State 46, New Jersey 32, Ohio 26, Pennsylvania 25, and the rest of the country 12. If one says that a generation hence the figures will probably be different may we not while admitting it suggest with Tennyson,

Most can raise the flowers now
For all have got the seed?

Thus in regions where the college has been potent public service has abounded and among college graduates public service of a distinguished kind is far more prevalent than in the

rest of the community. Can we desire a better basis for inferring that the American college has trained men for public service and civic duty and that with all its shortcomings and all its problems its present condition is hale and full of promise?

DISCUSSION OF THE COLLEGE IN THE UNIVERSITY

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. FINE: The Princeton statistics, so far as I am able to give them, confirm Mr. Willcox's conclusion. I remember that the average age at entrance of the class of 1880, to which I belong, was 18 years and 3 months. The average ages of the classes entering in 1905, 1906, 1907, 1908 have been 18 years and 10 months, 18 years and 2 months, 18 years and 9 months, 18 years and 9 months.

MR. ELIOT: It seems to me after listening to this very interesting paper, that the American college is not only a highly characteristic American institution existing in no other civilized nation of the world, but that it is of very high value, and ought to be preserved. I was quite at a loss how to reconcile this estimate of the American college with what I understand Professor Willcox rather to commend as the Cornell method of connecting, so to speak, the last year of college with the first year in the professional school. That method has become almost universal in our country. Indeed, I am not able to discover any institution, having both college and university professional schools, except Harvard, which absolutely refuses to adopt it. If there is another institution in this country which refuses to adopt that merging of the last year in college with the first year in the professional school, I should be very glad to get its name. What does that method mean? It means the sacrifice of the last fourth of the American college outright. It is also used to enable the professional school to begin its work one year earlier. Our Law School at Cambridge received a proposal signed by more than twenty colleges in the Middle West, that the Law School, which admits none who have not received already a first degree, should receive young men from these twenty colleges at the end of their Junior year; that then our Law School should report to these twenty colleges the standing of these young men in the first year of their Law School work. If their standing was fair, the twenty colleges thereupon proposed to grant the degree of Bachelor of Arts, each to its own young men who left the college at the close of the Junior year. What use the Law School made of the first year spent by those Juniors in the Harvard Law School, was immaterial to those colleges. Our Law School would have got its whole three-years' course. That would have given the Harvard degree in Law to those men, if the faculty had been willing to admit them at all on those terms. The Law School refused to take part in the sacrifice by those twenty colleges of the last year of college work. That process has gone beyond one year. It has gone as far as two years, the professional schools retaining the whole of their courses, and the colleges cutting their college course in two, retaining only two years for the college training. There is only one probable issue for that process. Young men will go from institutions of the secondary sort at the age of eighteen to nineteen straight into the university, with no college at all. This paper before us tonight seems to me to demonstrate that there is great worth, and value in the American college. How shall we preserve it? By insisting in the first place, that no course of instruction shall be counted for two degrees. That is, anyway, a highly artificial arrangement. It can be sanctioned by statute,

but it is not a real thing. It is not a real use to make of a year spent in study. For one year's work progress toward one degree, not toward two degrees, is the natural thing. The new policy is highly artificial; and its effect is to cut off one-quarter or one-half from the American college course. This threatens the destruction of the college. There are ways to stop this. First, to decline to count one year's work for two degrees, secondly, to require the preliminary degree for entrance to courses in our professional schools. Then you will have got the real structure of a university; and you will not have the structure of the university, in my judgment, till you do that. Moreover, that last requirement absolutely confirms and strengthens the American college; makes it sure that it will live, and sure that it will do in the future the admirable work which it has done in the past.

MR. SCHURMAN: I suppose I am misinformed about the practice of Harvard, judging from the line of reasoning President Eliot has adopted; otherwise, I should have asked whether the practice, which I had supposed to exist, of allowing students to complete three-years' academic work, then go into the professional schools, and come back after twelve months and receive their Bachelor's degree, were not equally inimical to the interests of the American college.

MR. ELIOT: That process does not seem to be inimical at all to the American college, for the reason that the man who at Harvard takes his degree in three years, or in three years and a half, has passed exactly the same number of examinations, or more in many cases, as men who have stayed four years to pass the required examinations. The work done for the degree of Bachelor of Arts is the same as to the number of examinations; and it is better in quality, decidedly better in quality. It is a social sacrifice, that is all; but it is not a sacrifice in either quantity or quality of the college work. On the contrary, the quantity is the same, and the quality is better. How is it effected? It is effected in two ways. There are many schools in the United States, in the north and the west, which are fairly competent to give their graduates the means of passing some college examinations when they enter. That is constantly done with us. Again, the ordinary year's work in an American college means less than eight months of application. If a young man spends eleven months in study in each of two years and ten months in the third year he will have spent in work as much time as the fellow who stays four years and works only eight months in each year. From our point of view at Cambridge this division of the whole college period has many advantages over eight months' work and four months' vacation in each of four years. We have all of us noticed undoubtedly the increase of summer work in our country. The University of Chicago gave us all a good lesson in this. The new methods affect the question of the comparative value—the intellectual value—of three years of strenuous and pretty continuous labor, as compared with four years of much less strenuous and much less continuous labor. We see many advantages gained with us by the men who take their degrees in three years, or three years and a half, over men who take four. I therefore believe that the granting of a degree of A.B. in three years, or three years and a half, or in four years—the option should be left—would have no tendency at all to impair the value of the training in the American college, or the value of the college to the community. Forty years ago our Medical School required an attendance of three years, for three periods of four months—twelve months in all. Our Medical School now requires four-years' attendance for nine months, and most of the men work all the summer vacation besides. The prolongation of the period of professional work is inevitable. We haven't got to the end of it, by any means. Is it not satisfactory to look forward to the condensation of college work into three years—that a boy of eighteen may get his

first degree at twenty-one, and then he may get his professional degree by twenty-four in law or in the ministry, or twenty-five in medicine for the present? We have just started a Graduate School of Applied Science. We hope to have those men stay two years, with a tendency to three, and to have the course based on a three-years' course for a first degree. That means that they will also have to spend five years or six on the total course.

MR. JUDSON: There is possibly another way in which this matter may be regarded. I suppose if the student in our American college, not intending necessarily to become a lawyer or a physician, should elect certain studies of legal character, or studies in science or in medicine, that these electives might be regarded as useful toward his general education. Surely, as a part of liberal training, certain legal studies would be quite applicable. Many students in college elect to take science courses quite largely—their tastes lie that way—and they take chemistry, zoölogy, and bacteriology to a very considerable extent. If a student in the choice of his electives selects them in these ways, can it be fairly said that his course will be injured under the elective system? Then the student taking his college degree—his first degree—under those conditions comes up to his professional work, and the professional school finds that the college has already fitted him largely for this work. He has done in college perhaps a third, or a quarter, or a half of the entire work of the professional school. That being the case, is it not a fact that the professional school may justly require less of him? It may be easily said that if the student would choose something else, he would have another year, and he would be older, and would know more. He might so far as that goes take still another year, and be still more valuable. But after all is it worth while to protract preparation for a profession to that extent? Many think not, and I must admit that we in our part of the country are inclined to look at it in that way. Of course, students enter our law school after they have taken their Bachelor's degree—quite a number of them. At the same time, students may choose their electives in such a way that they eliminate the first year in the professional school. It is because that has been done throughout the Central West, that these colleges of which President Eliot spoke have made to many of us the propositions in question. But in substance this is our way of looking at it, that a student in college may elect in such a way as not to injure his course, and yet, on the other hand, to fit himself for professional work. He does just as much in the way of general training in four years. He does just as much in the way of special training. And he wastes no time.

MR. ELIOT: The professional schools in our country are not diminishing their professional courses in consequence of the diminished total residence obtained from the student by the college and the professional school combined. It is the college, which counts toward the degree of Bachelor of Arts or Bachelor of Science studies which are really professional school studies, which makes the sacrifice. When a medical college, for example, requires for admission some knowledge of chemistry, physics, and biology, it does not teach the elements of those subjects itself, but maintains a full course of medical studies independent of, or in addition to, these subjects required for admission. If it admits a student with conditions in these elementary scientific subjects, that student must make up those conditions in addition to doing his full work on the appropriate studies of the medical school. The whole professional course must be carried out in a professional spirit.

This sacrifice on the part of the colleges I believe to be the most serious danger in the whole American system of education. Many colleges have already lost one-quarter of the amount of residence they used to require, and some have lost one-half. The method suggests that a young

man should make up his mind with regard to his profession by the time he has finished the Sophomore year in his college. Some young men can safely make this determination thus early; but I suppose it to be the experience of all of us that a large majority of college students do not know until late in their course what profession they are to follow. The most intellectual and ambitious of college youths are often in that position.

We lately had a discussion in our medical faculty about a modification of their present requirement of a degree in Arts or Science for admission to the school, and this discussion finally embraced the question whether we would make any concession to the policy of counting medical-school studies toward the degree of Bachelor of Arts or Bachelor of Science. It shortly appeared that several of the most eminent members of our medical faculty did not know that they were to be physicians or surgeons until late in the Senior year of their college course. The method of counting the same course of instruction toward two degrees is really applicable only to that minority of college students who know early the professions into which they are going.

The policy of counting the same course of instruction for two degrees has spread like wildfire all over the country. Indeed, I cannot find any institution except Harvard which refuses to adopt it. Its attractiveness, I suppose, depends on the keen desire to reduce the age at which young men now enter on professional life. We like to have young business men and young engineers and architects go through college or scientific school; but we also want to have them enter on the practice of their professions earlier than they do now, if they have been to college.

How difficult is the position of a college in New England or the Middle West which has no professional schools! It must submit to seeing its college course cut down; because the institutions which maintain both a college and professional schools are reducing the total residence required of students who go through both college and a professional school. For a college which has built up a four-years' course through much labor and many sacrifices to see a quarter or a half of its total course cut off is a serious loss and discouragement, yet it is apparently forced to make such disastrous agreements with other institutions which maintain both a college and professional schools.

MR. SCHURMAN: I fail to see, after all, any difference between Harvard and the rest of us. If there are any sinners, I think we are all sinners alike. May I ask what degree you propose to give in the Graduate School of Applied Science?

MR. ELIOT: Master in civil, electrical, or mechanical engineering or in architecture, etc.

MR. SCHURMAN: Now, begin at that end—the new schools. Harvard starts with a school—a graduate school of applied science. It feels the need of getting young men out early in life; and if young men will come to it with a Bachelor's degree, it will give them a professional degree in engineering or architecture in two years. At Cornell, or other institutions of the Association, where men enter similar professional schools from high schools, they are required to spend four years. Harvard will give men a degree in two years, provided they have a Bachelor's degree. Harvard feels it would be a hardship for men to stay four years for the Bachelor's degree; so Harvard gives the Bachelor's degree in three years—in science and sometimes in arts. Therefore, a man can get two degrees in five years. There is no difference. The Harvard solution is to cut off a year. Go back to the College of Arts and Sciences, and Medicine; the man who passes four-years' work in three is excused from work during the fourth year, and allowed to go to the professional schools. President Eliot has explained to us that that means no loss to the arts student, but a gain. I differ from him *in toto*. It is a loss. You must take account of the time element in education. You must take

account of the time required to master the subjects. Furthermore, that is possible at Harvard University only because they allow the students to take more arts per year than many of us think compatible with good educational work. We want them to absorb their subjects. And I hold that President Eliot's conclusion can be made to seem acceptable only when you regard education as a piece of cram. They at Harvard have before them the same problem as the rest of us. We all want to shorten the time required for preparation for the work of life. Professor Willcox read a paper describing the four-year course in the old fashioned college, the training in 1822, and President Eliot has very justly commended that paper. But it is a vindication of the old fashioned college with a four-year course. My point is, they at Harvard have cut off one year. In the other institutions, in Cornell for which I may speak, we refuse to cut off one year. We say the student must spend four years—eight terms—here for that degree. The ordinary student does that. We allow him to take so many hours per year, and the limit is so fixed that he cannot get through the work within three years. And we think that is no hardship. But in the case of a fellow who is going to stay three or four years more we feel that he might be permitted in the last year of his course to elect studies which form the scientific foundation of the profession which he is going to pursue. Let me illustrate—and I will use the same illustration as President Eliot used: I will use the illustration of medicine. Long before we had a medical department we had courses in chemistry, organic chemistry, physiology, anatomy, etc.; and students elected and specialized in them, in the last two years in the course. If today we allow our students to do substantially what we did before we had a medical department, they cover the work substantially of the first part of the medical course. We say that our practice has been correctly interpreted and described by President Judson of the University of Chicago. And the same thing is true of engineering. What is the work of the engineering course or architectural course for the first two years? It is mathematics, chemistry, physics, descriptive geometry, mechanics, and the like. Why shouldn't the student be allowed to elect these studies in the Senior year of his last course? A man who advocates the elective system as the distinguished president of Harvard has done, is the last to complain of this. One of the best things in our course is the arrangement whereby a student, though merely an arts student, is permitted in his fourth year to take law subjects. He would find such courses in law afterward immensely useful in a business career. The only difference I can find between Harvard and the rest of us is this: They divide at Harvard and the student comes successively to the different faculties; here there is an overlapping for over a year, and the student is simultaneously under two faculties.

MR. ELIOT: I can't understand that. Counting the same course twice absolutely proves that either the college has cut itself, or the professional school has cut itself. Either the college or the professional school has reduced by so much its demands for the degree—its own degree. Is not that absolutely certain?

MR. SCHURMAN: A boy enters this College of Arts and Sciences from a good high school. We admit him to an advanced standing, as you say. A man graduates with his A.B. degree from Yale (let us say) where he has taken law or medical subjects in his Senior year and comes to our law or medical school, and says, "I have passed such and such subjects." Can we not admit him to this school to advanced standing in like manner?

MR. ELIOT: The college ought to be willing, as the professional school is, to admit a boy to advanced standing, provided that the work offered has not been counted before. But suppose the high school should say: "We have got certain common subjects here; the college teaches

some of the things we teach, or we teach some of the things the college teaches; let us together count those subjects twice." Would that affect the total combined result of the training given by the two institutions, or not? It would reduce the total requirements of the high school and college by just the sum of the courses counted twice; by just that body of work. So the total requirements of two departments of a university are reduced by whatever number of courses you count twice, once in the college, and once in the professional school.

MR. SCHURMAN: Then a student who is looking forward to medicine, in the College of Arts and Sciences in which the subjects of the first year of the medical course are all embraced, must not take those subjects, because if he took those subjects and knew them all when he entered the medical school he would have to elect them over again, according to you. Although you are the great champion of elective studies in the country, you wouldn't let a prospective medical man take certain scientific subjects in his college course because, if he did, the medical school would pass him up, and that would be counting his subjects twice.

MR. ELIOT: But the medical school to which President Schurman refers is not thoroughly a medical school; the first year of that medical school is spent on college studies. The trouble is that the first year of the medical school with which he is most familiar is apparently filled up with college work.

MR. SCHURMAN: The medical school I know best is the Medical College of Cornell University. It is open only to college graduates, and in this respect has but two peers in the country. And so far as provision for instruction and investigation are concerned I may say that we spend on it annually about \$250,000, of which not one-fifth comes back in the form of students' fees. I am willing to have this record compared with any other in the country.

MR. VAUGHAN: Being a medical man, this discussion deeply interests me. There are many points of view from which it may be discussed. I agree with President Eliot that there is no justification in rewarding a student twice for the same work, and we do this in the combined six-year course. However, I regard this as only a temporary condition, due to the rapid transition in medical education in both the quantity and quality of its instruction. During relatively few years the medical course has been lengthened from two to four years, and the requirements for admission have been at the same time rapidly advanced. In this transition period the medical schools have accepted, as matriculates, students with nothing more than a high-school training, and some with four full years of college work. During this time the public has been deeply interested in medical education, and practically every state has now laws regulating entrance upon the practice of medicine. These laws have been formulated for the most part on the assumption that the highest educational requirement that could be demanded of the medical matriculate is graduation from an approved secondary school after a four-years' course. The elective system in the collegiate department of our universities permits the prospective medical student to elect much of the first two-years' work in the medical school, and it often happens that when he takes his Bachelor's degree the individual has already completed half of the medical course. The elective system has made the combined course not only possible but highly desirable. I believe that the college course, for the prospective medical student at least, should be cut down to three years, making the combined course seven instead of six years. As has been said here, the best students complete the college course in three years anyhow, and as a medical teacher I can say that the medical schools desire only the best students. The Medical School of the University of Michigan now requires two years of college

work for admission, and it has announced that in 1913 it will require three years. The medical student needs at matriculation a thorough basic knowledge of the three great modern languages, English, German, and French; of biology, physics, and chemistry; and he can acquire this knowledge as he should have it only in the collegiate departments of our universities. I am unalterably opposed to permitting any college degree to take the place of these requirements for admission to the medical school. Even a doctor of philosophy cannot enter our Medical School unless he can show that he has had instruction of the proper kind and quality in these branches. In order to get this instruction as we expect him to have it, he must take these subjects in the collegiate school. Medicine today consists in the application of certain facts gathered from the various sciences to the prevention or relief of disease. No medical school can turn out the best product unless it has proper material to start with, and the mere possession of a degree, without any reference to the kind of work done in securing it, should not admit to a medical school. It is not the intention of the best medical educators in this country to lose the substance in grasping after the shadow.

MR. NORTHROP: I was going to ask President Eliot simply a question for his comfort more especially. I understood in the debate this afternoon, on the semi-high-school colleges, that he was rather in favor of mixing things on the borders, and not having strict fences and gates. And I want to ask him if he doesn't think this plan of overlapping mixes things on the borders about to his satisfaction?

MR. ELIOT: It certainly mixes things very much, but not to my satisfaction. It is a system of paying two rewards for one thing. The degree is a marked distinction; but you are all giving two degrees for one thing. I want to make a statement in answer to Dr. Vaughan's very natural query, how it is possible to teach the medical subjects of the first year—anatomy, histology, physiology, and medical chemistry—when some of the men have not had chemistry, physics, and biology at their colleges. That is the real state of the facts. Some men, who like those subjects, have taken them in college; and some not. But all are men of much more prolonged training than the high-school graduates. These men are more capable of grasping the new medical subjects quickly—taking hold of them with vigor and enthusiasm—than the high-school graduates are. They have more capacity. It is a great thing to have the college training; and that training represents, in my mind, not so many years, but so much achievement and power. It is a great thing to have that behind a medical student; and for that reason at the Harvard Medical School today we have obtained the substance that we sought for—not the show but the substance—when we made the great sacrifice to be made in requiring a preliminary degree for admission. That step cut the medical school down much below the number of its former students. But the Harvard School never did a more wholesome act not only for its own prestige and merit, but for the cause of medical education in our country. I am happy to believe that Cornell is about to have a similar experience. I am very much obliged to Dr. Vaughan for the testimony he has borne to the transitional character of the condition in which we now are. I hope most profoundly that it is a transition, and that we are already through with the worst of it.

MR. MUNROE SMITH: Those who object to the combined collegiate and professional curricula assume that there is something wrong, not to say immoral, about following the same course to count for two degrees. Of those who favor the combined curricula some appear to share this view; they regret that the same courses should count for two degrees, but accept this practice on grounds of expediency. For my part, perhaps by reason of some mental defect or moral obliquity,

I am unable to see why the practice is objectionable. On the contrary, it seems to me to be logically inevitable, under existing educational conditions, that the same courses should count for different degrees. To avoid this result, curricula leading to different degrees must be so constructed that the subjects studied shall be totally distinct, no body of knowledge included in the curriculum which leads to one degree being recognized as a part of the curriculum which leads to any other degree. Until this is done, and so long as the same subjects are included in curricula leading to different degrees, it seems to me quite proper that the same courses should count for different degrees. If any moral issue is involved, it seems to me that the student who has acquired the knowledge which entitles him to two degrees, viewing the requirements for each degree separately, has a moral right to demand both degrees. It seems to me that he has earned them, and that to deny him what he has earned is unjust. In German universities, for example, the subjects prescribed for examination for the doctorate in law and those prescribed for examination for the doctorate in political science are in large measure identical. Three years of university residence are required before a student may present himself for examination for either degree; but if he has attained one of these degrees, he may present himself for examination for the other whenever he has studied the additional subjects required for the other and has presented a second dissertation. As a matter of fact, the student who has taken his degree in law can easily pass his examination for the political-science doctorate after one year's further study. The same result may be reached in this country when a student passes from one university to another, even if neither university has established combined courses. For example: a student who has received the Baccalaureate degree at Harvard, and who has elected from its extraordinarily rich and varied curriculum all the natural sciences and all the mathematics which he was able to take, decides to study civil engineering and applies for admission to the School of Engineering at Columbia University. Such a man would obtain advanced standing: he might possibly be admitted to the third-year class. In such a case he would receive the degree of Civil Engineer within two years. But the Harvard College course and the Columbia engineering course are each of them four-year courses. Why has this man obtained both degrees in six years? Because he has done two-years' work that counts for both degrees. This seems to be generally recognized as a proper and unobjectionable result. As soon, however, as the same courses are counted for two degrees in the same university, the practice appears to savor of impropriety; and if, as at Columbia, it be publicly advertised that students, while still in the college, may elect two-years' work in natural science and in mathematics which will count toward an engineering degree, the procedure seems to be regarded as distinctly improper. And if we should allow such students to leave the college at the end of their Sophomore year, and give them a college degree after two years of study in the School of Engineering, we should be accused of having committed the heinous offense of cutting the period of collegiate study down to two years. Why it should be proper to give two degrees on six-years' study to a migrating student and improper to do the same thing in the case of a student who pursues his collegiate and professional studies in a single university; and why a combination which is only relatively objectionable if the student is registered as a college student for four years and as a professional student for two years becomes wholly indefensible if the periods of registration are reversed—these are to me mysteries.

There was, of course, a period in American education when the curriculum of the college was almost wholly distinct, as regards subjects of study, from the curriculum of any professional school. Practically nothing was taught in the college which could count toward a professional degree, partly because the college curriculum was narrowly limited, and partly because professional edu-

tion was imperfectly developed. That period reached its end when new subjects, many of which had previously been regarded as "illiberal," were introduced into the college curriculum and, simultaneously, the professional schools ceased to be trade schools simply and introduced studies previously regarded as "liberal." It has already been argued, and with perfect justice, that the combined collegiate and professional curriculum is simply the necessary and legitimate result of the elective system. The necessity and legitimacy of this result can be denied only by asserting that a subject which is recognized as a proper part of a college curriculum becomes an improper part of such a curriculum if it be taught by a member of a professional faculty. In fact, this assertion is made; a vitiating "professional aim" is alleged; but how this aim affects the instruction has never been clearly indicated. Practically, the only difference generally observable is that the professional school makes the student work harder. From the college point of view this is perhaps illiberal. Here again I encounter distinctions which I fail to comprehend and shadings from propriety into impropriety which I am too obtuse to recognize.

MR. ELIOT: Where the immorality comes in—I didn't use that word, by the way; it was a word of Professor Munroe Smith's—seems to me plain. It is not immoral to get two degrees for the same knowledge under some circumstances. Imagine a three-years' course taken in the Harvard Law School, and the degree given by Harvard University for that three-years' worth of study. Then the young man says, "I have got the Harvard degree, I will go to the Law School of the University of Chicago; the course is about the same, I will get that degree, too." Why not? Two degrees for the same knowledge. It is perfectly understood on the young man's part, on the part of the two universities, and on the part of the public. The real question is, not of getting two similar or identical degrees on the same knowledge, either in whole or in part, but of getting two different degrees on the same knowledge. It is a question of what the public understand by these different degrees, and what the universities originally meant by them. The public still understand that two degrees stand for two things. That is the public belief. They suppose that the degree of Bachelor of Arts stands for a certain amount of knowledge, and that the degree of Bachelor of Law stands for another body of knowledge. Now, what the American colleges and universities are doing is to disregard those two meanings assumed by the public for these degrees. They no longer mean two separate bodies of knowledge. They mean in large measure the same amount of knowledge. That is where Professor Munroe Smith thinks the word immorality may come in.

FOURTH SESSION

THE LACK OF UNIFORMITY IN THE AMOUNT OF PREVIOUS STUDY REQUIRED IN PRINCIPAL, OR MAJOR, SUBJECTS FOR ADMISSION TO GRADUATE COURSES

PAPER PRESENTED ON BEHALF OF THE UNIVERSITY OF ILLINOIS BY PROFESSOR
DAVID KINLEY

The main purpose of this paper is to raise the question whether it is advisable for the institutions which comprise this Association to come to some common understanding as to the amount of preliminary study in the principal, or major, subject, required for entrance upon true graduate courses.

Most institutions set one year as the time necessary for a capable student, with proper preparation, to attain the Master's degree; and three years as the period for the Doctor's degree. What constitutes proper preparation, among the institutions, members of the Association? Do the members have, as a matter of practice or of theory, a common, or equivalent, requirement for admission to graduate work in the same departments of study? Is it desirable that they should have? The inquiry was made because of certain differences observed in the requirements for admission to graduate study, made by different departments in the same institution, and by the same departments of instruction in different institutions. The better colleges and universities of the country have succeeded, after some effort, in making requirements for entrance to the undergraduate work approximately uniform in amount and educational value, if not in specific character of the subject-matter. The question is whether there would not be some advantage if a similar result could be brought about for entrance upon graduate work. Of course the problems are in many respects different; nevertheless, it does not seem impossible to establish some general understanding among the institutions connected with this Association as to the amount of preliminary study required for admission to graduate work in different departments.

The proper preparation of a graduate student includes (1) training of his logical faculty—what may be called scholarly judgment, or ability to weigh critical evidence in his chosen field; (2) some knowledge of the facts of his chosen subject; and, (3) some knowledge of collateral, or allied subjects, necessary as tools, or incidental to the proper understanding of the principal field.

The third factor is very variable and may conceivably vanish, especially in a course which aims simply at the Master's degree. For the work of the Doctor's degree, of course, it can never vanish, since a knowledge of two or three languages is always required as a tool in mastering the principal subject.

Concerning the first requisite, there will probably be no difference of opinion as to the necessity for what has been called scholarly judgment, or power to weigh critical evidence. This is theoretically supposed to be the result of the undergraduate course. It is commonly described as training, or trained ability. The would-be graduate student in any subject must be able to weigh evidence in his field. How much training, how much scholarly judgment, how much power to weigh critical evidence, is required, still remains an open question. Nevertheless, if this characteristic is lacking, the individual cannot be a graduate student. For our present purpose we may assume in a general way that this ability is, or should be, the product of any good four-years' college course. That is, for our present purpose, we may regard this factor as determined for us.

The remaining factor is the amount of knowledge required in the principal, or major, study. How much must a student know in order to apply his critical power, or scholarly judgment, in the domain of his principal subject? Obviously some knowledge will, as a rule, be necessary; although in some departments knowledge of allied subjects is a better preparation than that of the department itself. In some subjects, like chemistry, it will

be impossible for a student to apply his training without a considerable knowledge of what are called the elementary facts of chemical science. Obviously, again, the amount of information necessary will be very different in different fields. The problem is to determine the amount of this information that should be required in different lines of study.

The basis of the information contained in the paper on this matter is 60 or 70 letters received from members of the faculties of ten institutions, representing some 15 departments of instruction. This information has been supplemented, although only to a slight extent, with some details from the catalogs. These latter have been used sparingly, however, because of the difficulty one has in understanding the catalog of an institution other than his own. Exact statements are hard to get, and what are here presented must be taken as showing the lack of uniformity rather than the exact amount of that lack.

The questions asked of the gentlemen who have been so courteous as to send the information were these: (1) What amount of preliminary study in the principal, or major, subject is required of students who enter to take the Master's degree, or the first year of work to be credited toward the Doctor's degree? (2) What principle, or principles, guide you in the classification of courses in your subject as undergraduate and graduate? It is proper to say that in not every case were both questions asked or answered. Some answers missed the point of the first question, and some were vague and unusable. Moreover, in a few cases different answers were given by members of the same department in the same institution. I have no doubt that if the same questions were asked of the same persons again, different answers would be given in some cases, simply because the lack of definite regulations and policies makes the retention of the same point of view over a period somewhat difficult.

The following summary of requirements is abstracted from the replies received. Of course, the statements in semester hours are, in some cases, only approximate. The number of semester hours in "a year's work" varies. Where it was not stated I have stated the minimum and probable maximum.

German.—In one institution four years, three hours a week, or 24 semester hours, are required for entrance upon graduate work. In another institution, "At least two years of undergraduate work is necessary for graduate work taken as a major subject; in practice probably three years," or 16-24 hours. In two other institutions the amount is described as four years of undergraduate work, or 24-30 hours. In another, German through the Sophomore year plus four hours of elective work, or 14 hours. In another institution five years of German are required, or 47 hours. In still another, "two years of college study" or a maximum of 20 hours.

Geology.—Three institutions require a year's work, or 6-10 hours. Three others require two years, or 12-20 hours.

History.—One institution requires 30 semester hours. Another, 16 semester hours. Another, one year's work, say 10 hours. Another, "reasonable preparation." Another, a knowledge of general history.

Botany.—One institution requires "six or seven undergraduate courses in botany,"

amounting to about 20 semester hours. Three institutions require "two-years' previous study." Another calls for three years, or 24 hours (though Registrar says two). Another institution calls for one year.

Chemistry.—Three institutions require three years of undergraduate work, or 25-30 hours. Another requires one year. Two others require two years, or 18-20 hours.

Economics.—One institution requires eight semester hours. Another, one year of work. Another has no specific requirements. At another the members of the corps of instruction differ, one saying two courses of about eight hours are required; the other saying that there is no specific requirement.

English.—One institution requires "reasonable preparation," or ordinary undergraduate work in a college. (Those who have read Professor Hubbard's article in the *Publications of the Modern Language Association* for June last, will appreciate the indefiniteness of this.) Another requires ten semester hours. Another does not inquire how much preliminary study of English has been done. Another requires 27 semester hours, and another, 18.

Mathematics.—Four institutions require three years, or one year beyond calculus. In two others the line is drawn just above calculus, or at 2 years of work.

Political Science.—As a rule no requirements are made; yet there are exceptions.

Physics.—Two institutions require one year's work, say 10 hours. Another, 24-30 hours; a third, three years, probably at least 24 hours; still another requires 15 semester hours beyond the general elementary course, or, probably 20-24 hours in all.

Romance Languages.—Two institutions require four years' work, 24-30 hours; two others, three-years' work, 18-24 hours, and one calls for a good reading knowledge of the languages together with some knowledge of the literature.

Sociology.—In four institutions no specific requirement is made.

Zoölogy.—Five institutions require two years of study, 20 hours; another calls for one, 10 hours.

Summarizing the requirements as well as we can we find that they vary as follows: In German from 14 to 47 semester hours; in geology, from 10 to 20; in history, from 10 to 30; in botany, from 10 to 24; in chemistry, from 10 to 25 or 30; in economics, from 0 to 8; in English, from 0 to 27; in mathematics, from two to three years, or 20 to 30 hours; in physics, from 10 to 24 or 30 hours; in zoölogy, from 10 to 20 hours. In Romance Languages, three to four years, or probably 20 to 26 hours. In such subjects as sociology, philosophy, and psychology, the preliminary study required is usually in allied fields.

The principal cause of these differences is probably the different ideals of departments in different institutions. There has been some imitation, no coöperation, and no conscious planning on the basis of a definite line of cleavage between undergraduate and graduate courses. As we shall see, few of us have framed any principles of classification of our courses into the two groups.

Another cause of the difference in requirements is the difference in the views held as

to the character of the Master's degree. Some institutions, especially, perhaps, the state institutions, regard the Master's degree as a specialized degree, similar in character to, though involving fewer requirements than, the Doctor's degree. The degree is in mathematics, in English, in chemistry, in history, and so on; and, as a rule, is not given for a year of study of a general character beyond the Bachelor's degree; in some institutions, however, while the Master's degree may be taken as a specialized degree, it may also be obtained for general study, on the basis of one year's advanced general work. In the latter case, of course, no specific requirement of preliminary study in the principal subject is necessary. The preliminary requirement is of importance when the student is a candidate for the specialized Master's degree, or for the Doctor's degree. If the former degree is to be obtained by a single year's work, the applicant must have considerable preliminary knowledge of the subject. If, on the other hand, he is a candidate for the Doctor's degree, the minimum three-year period is not enough in many departments for a student with no specific preliminary study of the subject in which he is working. In either case, differences in the preliminary requirements in different institutions become a matter of some concern to prospective students, and have some bearing on the standing of the institutions. If all institutions which conferred the Master's degree would give the degree both as a specialized and as a general degree, indicating in the diploma which is conferred, and applying preliminary requirements in the former case only, some of the difficulty would disappear.

It has been suggested by some of the correspondents that, while it may be desirable to standardize the requirements for admission to work for the Master's degree, given for one year of study, such a course is not necessary in the case of applicants for the Doctor's degree. In reply it need only be pointed out that in most institutions a year of study for the Master's degree is accepted as the first year of the three or four required for the Doctorate. Hence those who enter for a specialized Master's degree must necessarily be as properly graduate students as those who enter for the Doctor's degree by itself. Whatever may be said of the difficulties due to differences of requirements in the former case will apply therefore in the latter also.

It may be urged that uniformity of requirement for admission to graduate courses is of little importance, since a higher degree is not conferred until the candidate has reached a certain attainment of knowledge and training. It is doubtful, however, whether this "certain attainment" is very definite. One may suspect that if the standards of admission to graduate courses differ considerably in different institutions, the standards of attainment necessary for the degree are likely to differ also; and that they do differ, many people believe. Moreover, the matter is of some importance from the point of view of the student, and of a great number of colleges and universities which give the higher degrees. The institutions from which information has been drawn for this paper are all members of this Association. Presumably the Master's degree or the Doctor's degree, obtained after one year or three years of study respectively, at any one of several of them, would be regarded

to descend into commercialism, as of about the same "value." If, now, a student can get the Master's degree in one of them in a year on the basis of a year's undergraduate work in his particular subject, he is likely to go there rather than to another institution which requires him to make up a second year of undergraduate work before he will be permitted to go on with his graduate courses. The difficulty, at whose removal the standardizing of requirements for admission to graduate work in a particular department aims, is not met, therefore, by our comforting assumption that our final tests for the degrees are able to separate the gold from the dross. Perhaps this would do if we would examine one another's students instead of our own!

If one institution requires two or three years of undergraduate study in a particular subject, thus necessitating a considerable specialization in the undergraduate course, before admission to graduate work in the subject, it is a question whether the student who takes this preparation is better or worse prepared for graduate work, so far as training is concerned, than the student who has taken a more general undergraduate course. The finished Master or Doctor has, or should have, we may suppose, the general training of his undergraduate course and the training, carried to a greater or less extent, of the specialist. When a student becomes a specialist in his undergraduate course, he does so at the expense of breadth of knowledge, if not of training. If we could imagine two students of exactly equal ability in chemistry, with exactly equal aptitudes for chemical study and investigation, but one of whom as an undergraduate takes no chemistry, while the other takes three years of the subject, they would present themselves for graduate work in chemistry with the same amount of training and information, but the information would be in different fields. If both students should get the Master's degree after one year of chemical study as graduate students, they would be, educationally speaking, very different products. They would both have the training implied by the Master's degree, but the training and the scholarly power of research which it implies would be along different lines, and the character of their knowledge would be different. Unless we are willing to say that the student who specialized in chemistry as an undergraduate not only got an equal training with the other student, but also that his knowledge of chemistry added to his other studies gives him as *broad a view* and makes him as *liberally educated* as the other man, then should we not insist that the undergraduate specialist should take other subjects in his graduate year, while the general student specializes in chemistry?

A secondary purpose of the paper was to ascertain, if possible, what principles, if any, guide the departments of instruction in their classification of courses as undergraduate and graduate. What distinguishes a graduate course from an undergraduate?

The answers to the request for a statement of the principles of classification of graduate, as distinguished from undergraduate, courses, are, unfortunately, not clear and give but little information. They show that the writers had difficulty in distinguishing undergraduate from graduate courses, so far as the character of these courses is concerned. The question was answered from several different points of view, which shows, as might have

been anticipated, that a correct answer involves a determination of two other questions: what is a graduate course? and, what is a graduate student?

Obviously, if a "graduate course" can be defined, a graduate student is a student who is ready to take up such a course; on the other hand, if a "graduate student" can be defined, a graduate course is one suitable for such a student to take up. As will be seen from the answers received, few of us have consciously classified our courses as graduate and undergraduate, or determined the point in the progress of our subjects at which the graduate student may properly begin, on the basis of any principle of selection. Where such a principle of selection shows itself, it does so rather as a result of the policy adopted by custom, practice elsewhere, or what may be called an unconscious, instinctive feeling about the character of the work.

The haziness which surrounds the subject is worth emphasizing by quoting some of the replies received. "Undergraduate courses are for elementary training . . . graduate courses enable the student to make contributions." "Undergraduate courses are to give a general knowledge of the field. Graduate courses are those for intensive study of special fields." "Graduate courses require that the student be thrown on his own responsibility." "Graduate courses are for those who have the technical training and maturity of thought to do genuinely independent thinking." (If this is so, would not many of our so-called graduate courses be ruled out?) Again, graduate courses "are such as can be given by lectures and collateral reading with topics to be worked out by the student." Again, there is "no sharp line of demarcation between undergraduate and graduate courses." Again, "whenever a course is taken by graduate students almost exclusively, it is called a course primarily for graduates. Whenever the undergraduate element in the class predominates, the course is named as an undergraduate course. Whether graduates or undergraduates predominate in any course is, of course, determined by the grade of the work that the course represents."

The best answer of all is as follows: "As soon as a student has the tools for doing independent work in any subject, the course in that subject can be of graduate character. Graduate students are *Selbst-ständiger Arbeiter*."

It thus appears that graduate courses may be distinguished from undergraduate as those which (1) promote additions to knowledge; (2) encourage intensive study; (3) are suitable for independent thinkers who can work on their own responsibility; (4) are chosen by graduate students; (5) lend themselves to a certain pedagogical method; and, finally (6) differ empirically, if at all, no sharp line of distinction being possible.

Some of the correspondents appear inclined to confine the term graduate work to research alone. Is this the proper view? If it is, then doubtless many courses now called graduate and offered to candidates for the Master's degree, and many courses taken by applicants for the doctorate in their second year should be eliminated from the list of graduate courses. It is doubtful whether any one of us is ready to agree to this, for graduate courses may include both training and information courses. The graduate information

courses, however, differ from the undergraduate courses of a similar character in the point that the proper acquirement and classification of the information concerned requires the critical judgment that characterizes the graduate student.

The remark made by Professor F. G. Hubbard¹ concerning English courses holds true of other subjects:

Even a superficial examination of catalogs will show that no definite principles govern the distinction made between undergraduate and graduate courses. One of the largest universities opens to graduates all but one of its very large number of undergraduate courses; another offers but six undergraduate courses, all the others are graduate; a western state university does not credit as graduate work *any* course open to undergraduates. The ordinary curriculum groups its courses under the three familiar heads: "Open to undergraduates," "Open to undergraduates and graduates," and "Open to graduates."

All of which amounts to saying that courses which are not undergraduate are graduate, or both, etc.

We certainly cannot lay down any but the most general rule of classification to apply to several departments, but a real service would be done if representatives of the same departments in different institutions would agree on some classification, whether rational or not! In some subjects the line of cleavage would be determined largely by content of the subjects; in others, by method of treatment.

It may not be out of place to conclude with some questions suggested by what has been said.

First, is there not a tendency in some departments of some institutions to require too much preliminary study on the principal subject as a condition of entrance upon graduate work? Is not the requirement made by one institution in this Association enough for the others?

Second, does not the amount of the requirement in some cases, as well as its irregularity, overemphasize the importance of specialization at the expense of breadth in undergraduate work? Is it desirable to make requirements such that undergraduates must specialize in order to get a second or a third degree in a reasonable time? The German boy who has finished his gymnasium course ordinarily gets his Doctor's degree at the end of three additional years. If tradition is true, he generally wastes the first of these three years, works moderately the second, and delves very hard through the third. In other words, he gets his Doctor's degree at the end of not more than two years of serious work beyond the gymnasium. Most of us would agree, I think, that the gymnasium training will land a student at about the same point in his educational development as is reached by the end of the Sophomore year in the institutions which are members of this Association. We ask our students to spend two additional years in undergraduate work, and three at least beyond this in graduate work, before we are willing to confer the Doctor's degree upon them. Are our Doctors better trained than the Germans? Is our Doctor's degree of higher value? If so, why should we not urge that the work of the Senior year, at any rate, in the

¹ *Publ. Modern Lang. Assoc.*, June, 1908.

case of students who are specializing, shall be accepted by the German universities as part of the work for a degree?

In the third place, a practical conclusion of considerable importance is the encouragement of the smaller colleges to push a student on to graduate work. If the universities which offer work for advanced degrees make a gap between what the smaller colleges can offer in a given subject and what the universities require for admission to graduate work in that subject, graduate study may be discouraged. Should we not try to close this gap in some way or other?

Finally, can we not establish, for each department of study, some principle or rule, rational or empirical, for the classification of courses?

DISCUSSION OF AMOUNT OF PREVIOUS STUDY FOR ADMISSION TO
GRADUATE COURSES

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. HADLEY: The distinction between undergraduate and graduate work seems to me to lie in the purpose which dominates the student. Graduate work is distinctly professional. A graduate is studying his subject with the expectation of becoming a *Doctor*, that is, a teacher. It might well happen that a course will be helpful both to those who do not intend to teach the subject and those who do. In that case undergraduates and graduates can advantageously be admitted to the same class. But the distinction of purpose will exist. The line of demarcation between the undergraduate and graduate work may not always be obvious to the teacher, but it can exist, and ought to exist, in the mind of the pupil.

MR. MAGIE: The conditions for admission to candidacy for the Doctor's degree in Princeton University are sufficiently different from those which have been described to lead me to give some account of them.

Of course as in all other institutions a Bachelor's degree is required of the candidate. We then, instead of exacting any particular number of courses to be completed in the subjects preliminary to the work which a student expects to follow, set preliminary examinations on those subjects, which every candidate for the Doctor's degree must take. His examinations cover the elementary parts of the subjects so far that the student who satisfies them is evidently able to go on with profit in graduate work. These examinations include one on the candidate's reading knowledge of French and German; sometimes the examination in one of these languages is deferred. We always find that before the term of a student's candidacy is over he is able to use these languages in his work.

To illustrate from my own subject—physics—the preliminary examinations are set in elementary mathematics and in general physics. I think everyone will see from this illustration just about what our grade of requirement is.

The requirements for these preliminary examinations were established by a committee representing most of the departments of study in the university and have not been fixed simply by the professors of each department, so that it may be said that the standard is about the same in all departments. After a student can pass such an examination as this we make no further inquiry as

to what he has actually been over. These examinations have served very successfully to keep out of the Graduate School some men who were really not qualified by previous training or character for graduate study, but who were simply misled by mistaken ideas of their own powers. The system has really worked very well. It has avoided the necessity of fixing standards in any arbitrary way. I quite agree with President Eliot in his desire to break down as many fixed barriers as possible. I think that fixed standards which allow no flexibility are extremely embarrassing. It is far better to have some flexible method for handling such questions.

Then as to the courses which graduate students are allowed to take, our distinction, while it is not very clearly expressed, would be expressed very much like this: Those undergraduate courses which are sufficiently technical to serve as courses in which the subject itself is aimed at rather than general information about the subjects, are as a rule open to graduate students. As a matter of fact students who come to us and pass the preliminary examinations find now and then that our undergraduate courses, especially those which are offered in our Honors Courses, are of just the sort which they need in their first year. The distinction between courses which should be open to graduates and those which should not be can easily be made in practice, although I think it would be almost impossible to write down this distinction on paper.

MR. KINLEY: May I say that in mentioning semester hours I did not mean to lay stress on "credits"? What has just been said by Professor Magie shows very clearly that a certain requirement is expected for admission to work of graduate grade in studies selected. To describe this in terms of semester hours, I attempted to reduce them, as they were reported from different institutions, to a basis which would represent equivalent amounts of ground covered in the respective subjects. That is, the term semester hours, as I have used it, indicates a certain amount of work done. It makes no difference whether we call the number of hours 30 or 10. The point I was trying to bring out is: What amount of mathematics, for example, should a person have before he would be called a graduate student in mathematics? This amount of mathematical knowledge is important. The number of semester hours which designates it is unimportant, but is a convenient means of making comparisons between different institutions.

MR. BALDWIN: It seems to me that what we have to bear in mind is not so much either quantity of time in these two respective divisions of students' work, but method and aim. At the Hopkins the thing seems to resolve itself very largely into the question of method. In the graduate school the men are not pupils simply of the master who teaches them, but the method adopted is one of coöperation. It isn't teaching a man something; it is setting him to work and working with him. To me that has always been the most helpful way of classifying my students—the men I simply have to teach, tell things, and the men with whom coöperative work can be done. At the Hopkins we have had this up in a very practical way lately in our recent action to establish an A.M. degree. After going through what is being done in other universities, our committee decided that one year of the graduate instruction was practically fruitless. The end is not reached. You can't fit a man for his profession or give him any very general start to it in a single year. So we have deliberately established a degree requiring two years of genuine graduate work for the A.M. degree. This is an attempt to reach an end. It gives a course long enough, and of serious character enough, to make the A.M. degree a professional degree, especially for teachers. I should like to call attention to this departure, because it is an attempt to give dignity and value to the A.M. degree.

MR. HILL: While apparently it would be well to formulate some rule by which to distinguish graduate from undergraduate courses it seems to me that the difficulty arises from our requirements for the Bachelor's degree. Where, as in Princeton in the departments of mathematics and physics, there is an "Honors Course" for undergraduates, we get a natural basis of requirement for entrance upon graduate work and for the distinction of undergraduate from graduate courses. In the Canadian universities "Honors Courses" are arranged in classics, philosophy, etc., and graduate instruction naturally presupposes the completion of an "Honors Course" in the same subject or group of subjects. Under the conditions in most of our American universities, it would be very difficult to formulate a distinction and standardize graduate courses.

In the University of Missouri we have for a few years past required students during the first two years to take one general or fundamental course in each of the great divisions of the work in the College of Arts and Science, and during the last two years to make a major of at least twenty-four hours in one of these divisions, not less than half of this work being chosen from the courses "for undergraduates and graduates." In this way all students on graduation with the A.B. degree are prepared for graduate work in the subject selected for their undergraduate major. What determines whether the course belongs to this group or to the group "for undergraduates" is, however, left entirely with the professor in charge of the subject. On the whole the system seems to work quite satisfactorily and results in maintaining reasonable standards for graduate work.

MR. JUDSON: I am extremely skeptical of the practicability of trying to systematize those courses which we call graduate courses. The status of graduate work seems to me to depend on several postulates. Perhaps one of these postulates is a number of students who have had an adequate college course indicated by the Bachelor's degree. Perhaps a second postulate would be that these students have about three years of time which they are willing to give in working toward the degree of Doctor of Philosophy. A third postulate would be a faculty composed of men who have had such training that they are masters of their subjects. Admitting these postulates, I am inclined to say that a graduate course is a course of instruction or of study of such kind as a faculty of that character thinks it advisable for such students to follow. That seems to be about as near a definition as can be attained. Obviously, the weight of a Doctor's degree depends in the long run on the character of the faculty and the reputation of the institution granting the degree. Doubtless there will be great variety in the way in which subjects are handled in different institutions. That does not seem to me, however, a matter of great importance. Standardizing courses of instruction may be fairly easy in a secondary school, and perhaps in the earlier years of a college. The difficulty, however, increases rather rapidly as we go up in the scale, until in the later years the practicability of thus standardizing fades out. It does not seem to me, therefore, practicable to standardize graduate subjects, nor does it seem to me very desirable.

MR. AMES: It has been pointed out that there has not as yet been any well-defined differentiation between graduate and undergraduate instruction. If that can be defined, if a standard can be established for determining what courses properly can be classed as graduate and what as distinctly undergraduate work, this whole matter, it seems to me, will settle itself automatically. Let me illustrate, when a student first presents himself to register in the Graduate School let him be referred to the instructors of the department or departments in which he proposes to work. It should then be incumbent upon the department concerned to determine whether or not the candidate is prepared to pursue with profit any of the graduate work offered. If not, the student should be encouraged

to pursue such undergraduate courses as would be necessary to properly fit him to take the work of a more advanced character. This is the method we endeavor to carry out at the University of Pennsylvania. When the Graduate School was first established at Pennsylvania, the graduate courses were entirely distinct from the undergraduate work. This was due in part to necessity owing to the fact that from the beginning the Graduate School was coeducational while the College was not, hence a strict separation of the graduate and undergraduate instruction resulted. In course of time it became apparent that the graduate courses were of a more advanced and technical character than those given to undergraduates, and a distinct differentiation of graduate from undergraduate work resulted. In more recent years, the conviction has grown that certain courses given hitherto only in the College could be taken to advantage by graduate students, and conversely, that certain graduate courses could be pursued with profit by the exceptionally qualified undergraduate student, so that it resulted, in some instances, in identically the same courses being given in both departments. In view of this situation, the example set by many of the other universities in this Association was followed by throwing open certain courses both to graduate students and members of the upper classes in the College. Such courses seem at present to meet the actual need. The character and the amount of work required of the graduate students in such courses should be properly regulated in order that the standard of graduate instruction may be maintained. The number of such mixed courses at Pennsylvania is still relatively small and may be regarded as an exception to the regular rule.

MR. PAGE: Of course it is not a simple matter to determine just what the content of the ideal undergraduate course in a given subject should be, or at just what point graduate work in the subject should begin. The practice of the University of Virginia is so different, apparently, from that of any other member of this Association, that I hesitate to take up your time with a description of it. However, I may say that the Baccalaureate degree is conferred in the College upon the candidate who has completed a prescribed minimum amount of work in ten subjects. Although the degree may be won by the candidate with normal preparation, ability, and industry, in four years, the work to be performed is measured by subjects, and not in hour-units. As I have said, a certain minimum amount must be performed in each subject offered: and this minimum amount we call the undergraduate course in each subject concerned. In certain subjects, as Latin, Greek, mathematics, etc., the minimum amount which the candidate selecting one of these subjects may offer, consists of two years of college work. In others, as economics, history, chemistry, etc., the minimum mentioned consists of one year of college work. The candidate is not allowed to offer portions of these undergraduate courses; he must offer the whole of the undergraduate course in Latin (say), or no Latin at all.

The various courses, in any subject, which are open only to candidates who have completed the undergraduate course in the subject, are designated as graduate courses. Certain of the graduate courses are research courses; others are not. The latter are usually open to the "undergraduate," i. e., the candidate who has not yet obtained the Baccalaureate degree, as well as to the graduate student.

MR. ELIOT: It is delightful to hear again from the University of Virginia. That university has persisted in a very different scheme of higher education from that common in the United States. The diversity has been instructive and influential. The debate this morning has brought out the fact that there is no uniform rule whatever in the institutions here represented with regard to gradu-

ate and undergraduate courses. And, moreover, there is no agreement with regard to the principle of the division between them; they are inextricably mixed up. If you will examine the annual report made by the Dean of the Faculty of Arts and Sciences at Harvard, you will find that in all the courses which pass the elementary stage, that is, the sketch lecture courses and the most elementary courses in the laboratories—the moment you pass that line in that report nearly every course contains Graduates, Seniors, Juniors, Sophomores, Freshmen, and special students. That is the condition of those courses which we list as courses open to graduates and undergraduates. Why are they so heterogeneous in membership? Because the individuals who make up a college class—I might say the Sophomore—are in respect to any subject—history, Latin, chemistry, physics—at very different stages of progress. Moreover, the graduates of other institutions who come to us with the degree of Bachelor of Arts or Bachelor of Science are at different stages of progress. Some of them have got far in Latin, or history, or chemistry; some of them haven't even touched the elements of those subjects. The graduates are in a mixed condition, at Harvard and at every institution. That is, there is no uniformity or approach to uniformity in their attainments and mental condition. Therefore, they wisely distribute themselves all through the courses which are open to undergraduates and graduates. They must—there is no other way. They simply avail themselves of the opportunity which the university offers them. But are the Harvard courses open to graduates and undergraduates distinguishable in their method from those open to graduates? Not at all. We have not the least distinction, as stated by Professor Baldwin of Hopkins. What is the reason? Because we try to teach our undergraduate courses exactly in the same way as we teach our graduate courses, namely, the coöperative way. There is no distinct variety of ways in which you should teach graduates and undergraduates in a university. There is only one best way, and that is the way which was described by Professor Baldwin as coöperative. I think Professor Baldwin said that certain courses at Hopkins were characterized by a lecture method. What class of course is so characterized with you?

MR. BALDWIN: Certain graduate courses. But we have a rigid rule that no class shall contain both graduates and undergraduates.

MR. ELIOT: That is most interesting. Now, the lecture courses with us are very few and elementary. You can take one history, one government, one philosophy, one economics lecture course at Harvard; it is an inferior form of instruction; it is almost abandoned in our professional schools, and we regard it as fit only for our sketch courses. That is to say, for outlining a subject by a master of the subject for the benefit of beginners. That is true all through Harvard University. Therefore, we have no distinction in method of instruction between graduate and undergraduate courses, except in the courses offered to beginners—absolute beginners—in a subject.

Now, is there any distinction with regard to the principle of specialization? Not at all. We regard specialization as absolutely the only method for a wise youth when he knows what he is fit to specialize in. It is for the welfare of society that so soon as a student knows what he is fit to specialize in, and in what he will be most useful, he should specialize. A youth of eighteen who knows what his special capacity is, is a fool if he does not specialize moderately at eighteen. And anybody that advises a youth, who knows what he is specially good for, not to specialize, is taking a heavy responsibility toward him and toward society. Therefore, specialization doesn't afford any means of distinction between undergraduate and graduate courses. Is not this a fundamental truth in regard to education? We often speak of all-round men, and we have a kind of general

expectation that an educated youth will exhibit an all-round capacity. William James has given us the meaning of that. We like to have the youth taste of all the different springs of knowledge that he may find out what suits him the best, and where his most useful life-work is to be. And also because, as has been pointed out, youth is the time for forming habitual modes of thought, and we want to have every youth get those habits which are going to be most serviceable to him and thence to society. He should have accomplished this by eighteen. Here again we have no means of distinction between undergraduate and graduate work. It is all a question of individual treatment. Accordingly, when a young man comes to us holding a degree of Bachelor of Arts from some one of these institutions, and asks what he had better do to get a Master's degree, we treat him by the method of inquiry as to what his special capacity is.

We do make another use of the Master's degree with us, namely, we use it as a fourth-year's work for men who have got the Bachelor's degree in three years. But we have learned by experience that the Master's degree, which is only given by us to students who accomplish at least one year's work with distinct credit is a very serviceable degree—notably for the teacher. Seniors themselves take the Master's degree with us every year, who are really not specialists in the ordinary sense, but who have got a broad culture and have had at least one year's work with high credit. And I have made in recent years this observation over our country: There are many boards of trustees now conducting colleges and universities, and many school committees and school superintendents who actually prefer men who have had the Master's degree at Harvard to men who have had the Doctor's degree at Harvard, or anywhere else. For teachers of recent years I have noticed that the Master's degree is often preferred by appointing powers to a Doctor's degree. The reason is that they have not confined themselves to a single line of work. Now, at Harvard for many years we have had the means of observing what proportion of students are capable of specialization. It is a small minority who are capable, and therefore, at Harvard, as I suppose in all our institutions, the general selection of studies remains with the traditional subjects—with the languages and philosophy and history. And it is only the minority who are capable of a real advantage in specialization. Therefore, I should deplore any effort to establish any distinct lines between undergraduate and graduate study, or any schedules of required attendance, whether it was departmental or other. I believe this matter of the higher degrees should be altogether a matter of providing for individual need, and individual desire and hope. And I have read with great pleasure an article in which it was shown that the attendance in the graduate school in the United States was not determined by pecuniary considerations, or by the number of scholarships, but that it was determined by the quality of the teachers in the several advanced departments of the universities, and by the facilities which the several universities offer. That was a very delightful demonstration. That shows us to be in the real line of endeavor on the subject, and leads us entirely away from every effort to standardize—if I may use that objectionable word—our graduate schools in any sense.

MR. BALDWIN: I should like to be allowed to discuss the subject a little farther. President Eliot said that he was presenting a fundamental truth, I think, in his statement that only a small minority of students were capable of effective specialization. In this I agree with him. The fallacy, as I take it, the fundamental error in the first part of his address, came in here in assuming continuity of aim and interest as between the Freshman and the teacher. As a matter of fact, the undergraduate does not have a serious aim as a general thing; half of the college students do not. They are not ready or mature enough to pursue studies by the sort of coöperative method of investi-

gation required in graduate work. I used to have to teach a certain class at Princeton, numbering 200 or 250 men—that number being present at each lecture. One has to pitch such a lecture for the average man, or for the dullest man in the class. This is true of all the colleges in which such large classes occur. One has to pitch his entire instruction for the poorest student. I conclude by saying that, if I had to teach in one course the graduate student, the Freshman, and the Sophomore, I should be tempted to resign.

MR. ELIOT: I consider that those youths who do not have a serious aim, who have simply an attendance attitude, have nothing whatever to do with the discussion before us. I don't accept that kind of view as determining the undergraduate stage—not at all. Our method at Harvard is to ignore the shiftless man altogether. Undergraduate courses ought not to be taught for him; he is unsuitable for college, as well as the graduate school. We should always endeavor to adapt our teaching to the men who have interest in their work.

MR. ANGELL: I had hoped we might hear from some of the gentlemen who are sufficiently learned to say a word about that matter about which a question is often raised, whether we are not requiring more for the Doctor's degree than the best German university, and whether, therefore, we are not requiring more than we ought. We should be glad to hear from some of the experienced gentlemen, and get some light on that matter. I find several of our own Ph.D.s. from the German universities who seem to be of that belief. If so, it is a serious question for us all.

MR. ELIOT: You exclude your entire audience from speaking when you invite only those who are more experienced than you to speak. But I will say that at Cambridge we do sometimes not require, but permit candidates for the degree of Doctor of Philosophy to stay a great deal too long with us, and write a little too long a dissertation. It is just one of the American exaggerations, but we have seen no way to prohibit these forms of individual liberty with us, though we recognize the existence of the exaggeration.

MR. ANGELL: Is it not true that one of the impositions which many of the universities suffer from offering liberal fellowships as inducements to persons to come and enter for the Doctor's degree, fills these universities occasionally—perhaps too frequently—with men who ought never to have been encouraged to take the Doctor's degree, and whom it is very hard to get rid of when they are once upon the ground, and who survive all attempts to persuade them that they are mistaken in their calling? We, without any money to give fellowships with, are affected with that race somewhat, I might say.

APPENDIX I

REPORT OF THE EXECUTIVE COMMITTEE

At the Ninth Annual Conference of The Association of American Universities, held at Ann Arbor, January 9 and 10, 1908, the following resolution, adopted by the Modern Language Association of America, as follows:

Resolved, That it is desirable to adopt some plan of obviating as far as possible the duplication of work in doctoral theses intended for publication,

and submitted to The Association of American Universities with a request that action be taken, was referred to the Executive Committee, with power. At the meeting of the Executive Committee, held in New York on May 7, 1908, it was decided that, in view of the attitude of the delegates at the Ninth Annual Conference of the Association that it would be unwise to take up this question, no action be taken thereon. The Secretary was instructed to notify the Modern Language Association of America of this decision, and accordingly did so.

At the Ninth Annual Conference it was resolved as follows:

Resolved, That the Executive Committee of this Association be empowered to formulate and put into effect such plans as will tend:

First: To establish closer relations between the universities of Latin America and the institutions represented in this Association;

Second: To establish closer relations between investigators in the different sections of the American continent;

Third: To examine into the conditions under which students from Latin America may advantageously be admitted to the universities of the United States.

At the same meeting of the Executive Committee, it was decided that the representatives of the members of the Association at the forthcoming Pan-American Scientific Congress be asked to act as a special committee to investigate these questions and to report thereon. The Secretary was requested to ask the several delegates to act as members of this committee, and accordingly did so. Professor L. S. Rowe of the University of Pennsylvania was appointed by the Executive Committee chairman of this special committee. As the Pan-American Scientific Congress has only just taken place, it will be some weeks before the report of this committee will be placed in the hands of the Executive Committee.

APPENDIX II

REPORT OF THE SPECIAL COMMITTEE ON AIM AND SCOPE OF THE ASSOCIATION

The Special Committee on Aim and Scope appointed by vote of The Association of American Universities at the Eighth Conference held at Harvard University, November, 1906, continued and enlarged by the addition of the president of the Carnegie Foundation by the vote of the Association at the Ninth Conference held at University of Michigan in January, 1908, having considered the matters referred to it, submits herewith the following report and recommendations:

Your committee has held an informal conference with the Committee on Standards of the National Association of State Universities. President George E. MacLean, chairman of the latter committee, stated that the National Association of State Universities had accepted a report which described the American university as an institution which should include (1) a college resting on a four-year high-school course and offering two years of general or liberal work and two years of university work; (2) professional courses in law, medicine, and engineering, based upon the completion of two years of college work; (3) a graduate school properly equipped for research work. The report further stated that for the present an institution which was properly equipped to give instruction leading to the Ph.D. degree in at least five departments, and which had at least one professional school resting on a basis of two years of college work, should be regarded as "standard." In accepting this report, the National Association of State Universities continued its committee and directed that said committee should coöperate so far as possible with a similar committee of The Association of American Universities.

In view of the adoption by the Association at its meeting in 1908 of a report recommending that the requirement of college work preliminary to professional study be enforced "with increasing strictness," and in view of the action taken by the National Association of State Universities, your committee recommends that a professional school based on one year of college work should not henceforth be recognized as a university school; or, in other words, that the minimum combined collegiate and professional course of five years should include at least two years of college work. Your committee reports that the University of Iowa, the University of Kansas, and the University of Nebraska appear to be eligible for membership, because each of these universities possesses a creditable graduate school and each has announced that two years of college work are to be required for admission to its medical department. In the University of Kansas, this requirement becomes effective in 1909; in the University of Iowa, in 1910. Your committee also reports that the University of Indiana is eligible for membership, because this university possesses a creditable graduate school and has definitely fixed and announced a requirement of two years of college work for admission to candidacy for a degree in law.

In the matter of the standardizing of American colleges, your committee reports that it has

The Association of American Universities

considered this matter, that the Carnegie Foundation has already studied the question, has conducted an investigation, has made visitations, and expects in the not distant future to have a list ready for publication; and that it seems desirable for the Association to await the publication of the results of this work before taking further action, and at that time to invite the coöperation of the National Association of State Universities. All of which is respectfully submitted.

CHARLES W. ELIOT, Harvard
CHARLES R. VAN HISE, Wisconsin
J. G. SCHURMAN, Cornell
MUNROE SMITH, Columbia
HERMAN V. AMES, Pennsylvania
HENRY S. PRITCHETT, Carnegie Foundation } Committee

APPENDIX III

REPORT OF THE SPECIAL COMMITTEE ON UNIVERSITY NOMENCLATURE

There is no consensus of opinion among universities as to the proper use of the terms course, school, college, department, and division.

The term *course* is very generally used for a subdivision of a subject; as, for instance, courses 1, 2, and 3, in mathematics. The word is also frequently used for the entire four-years' work of a student leading to a degree. This is best illustrated at Pennsylvania, where the subdivision of the work in arts is, the course in arts and science, the course in biology, the course in music, and of the work in applied science, which includes the course in chemistry, in civil engineering, etc. The same use is illustrated in the University of Wisconsin where in the college of liberal arts are the courses in commerce, pharmacy, chemistry, and the course for the training of teachers.

The word *school* is not infrequently used to indicate one of the largest subdivisions in the university, as, for instance, at Harvard, Yale, and Columbia, are divinity and medical schools, and at Pennsylvania the school of arts. By a number of institutions the word school is used for the grouping of subjects to a definite end in one or more colleges; for instance, in the college of engineering, there may be a school of civil engineering; in the college of liberal arts, a school of music; and in the various colleges, a graduate school. In the South the word school is widely used to designate the different subjects of instruction; thus, we have a school of biology, a school of history, a school of German, a school of French, etc.

The word *college* is used in all the above senses, with the possible exception of the last. Its use in the broad sense is illustrated by Harvard College in Harvard University, Columbia College in Columbia University, and Yale College in Yale University. At California, however, the term is used in a narrower sense, that institution having a college of letters, a college of social science, a college of natural science, a college of commerce, each of which would be included in Columbia College, or Harvard College, or in the college of letters and science at Wisconsin. At Chicago, college is used in various senses, one of which is subordinate to school, since one of the divisions of the school of education is the college of education. Another use of college is to designate a building, or group of buildings, as, for instance, Sage College, in Cornell University, a dormitory for women.

The term *department* is used for the major divisions of the university in a number of institutions without reference to whether they are coördinate, or the divisions made on a similar basis, as, for instance, at Harvard University, Harvard College is a department, as well as the Dental School, the university library, and the Bussey Institution. Michigan, Texas, and other institutions, use the term department in a sense similar to, but not identical with, that of Harvard. Thus, the work in the liberal arts, in law, and in medicine, is organized as departments. A much more general

use of the word department is that for the different subjects given in the university, as, for instance, the department of Latin, the department of biology, etc. As thus used, the word department is equivalent to the southern use of the word school.

The term *division* at Columbia is used in the same sense as department at Harvard, and at some institutions for branches of the university organization which do not seem to fit in with the other branches, as for instance, university extension division at Wisconsin.

It appears from the foregoing that universities, the institutions which are supposed to systematize and advance knowledge, which ought to illustrate the principles of education in their organizations as far as practicable, have permitted without protest a hopeless confusion of nomenclature which would not be tolerated in any of the sciences.

In making the recommendations below it has been the aim of your committee to assign to the various terms the meanings which are the fairest compromises they have been able to work out under the principles of giving each term its best and widest use and at the same time restricting each term to a single meaning, and it seems imperative to us that this last be done in order that our official publications may be intelligible.

Therefore your committee recommends:

1. That the term *department* be restricted to the various subjects taught in the university; as, for instance, the department of Latin, department of mathematics, department of physics, etc.
2. That the term *course* be restricted to the subdivisions of a subject; as, for instance, course I in English.
3. That the term *college* be restricted to a part of the university the standard of admission to which is the equivalent of that required by the Carnegie Foundation for the Advancement of Teaching, and which offers instruction leading to a first degree in Arts, Letters, or Sciences.
4. That the term *school* be restricted to a part of the university, the standard of admission to which is not less than the equivalent of two-years' work in the college and which offers instruction of not less than two-years' duration leading to a technical or professional degree.

APPENDIX IV

SPECIAL REPORT OF THE EXECUTIVE COMMITTEE IN REGARD TO THE INTELLECTUAL COÖPERATION BETWEEN THE INSTITUTIONS OF LATIN AMERICA AND THE MEMBERS OF THE ASSOCIATION

[PRINTED HEREWITH BY VOTE OF THE EXECUTIVE COMMITTEE MAY 3, 1909]

At the Ninth Annual Conference of The Association of American Universities, held at Ann Arbor, January 9 and 10, 1908, it was resolved as follows:

Resolved, That the Executive Committee of this Association be empowered to formulate and put into effect such plans as will tend:

First: To establish closer relations between the universities of Latin America and the institutions represented in this Association;

Second: To establish closer relations between investigators in the different sections of the American continent;

Third: To examine into the conditions under which students from Latin America may advantageously be admitted to the universities of the United States.

At the same meeting of the Executive Committee, it was decided that the representatives of the members of the Association at the forthcoming Pan-American Scientific Congress be asked to act as a special committee to investigate these questions and to report thereon. The secretary was requested to ask the several delegates to act as members of this committee, and accordingly did so. Professor L. S. Rowe, of the University of Pennsylvania, was appointed by the Executive Committee chairman of this special committee. At a meeting of the Executive Committee held in New York on May 3, 1909, Professor Rowe presented the report of the special committee. The Executive Committee is indebted to Professor Rowe and his associates for great assistance in the preparation of the recommendations below. In pursuance of the above resolution of the Association, the Executive Committee at this meeting voted the following recommendations:

1. That each university make arrangements to establish regular means of communication between that university and similar institutions of learning in Latin America.
2. That the Association inform such institutions that such arrangements have been made.
3. That the universities coöperate with the International Bureau of the American Republics, and in particular with the special "Section of Education" to be established therein in obedience to the resolution of the Pan-American Conference of 1906, and also with the special "Section of American Bibliography" when established therein in accordance with the resolution adopted by the recent Pan-American Scientific Congress and contained in the following resolution:

RESOLUTION RECOMMENDING THE ESTABLISHMENT OF A SECTION OF AMERICAN BIBLIOGRAPHY IN THE INTERNATIONAL BUREAU OF THE AMERICAN REPUBLICS

Recognising the importance of establishing closer relations between investigators throughout the American Continent and of disseminating the results of scientific investigations, the Pan-American Scientific Congress

Resolves, To recommend to the Governing Board of the International Bureau of the American Republics:

I. That a special section be established in the International Bureau of the American Republics to be known as the "Section of American Bibliography."

II. That the Director of the Bureau invite authors and investigators to send their publications to the Bureau, on receipt of which, notice thereof will be published in the *Bulletin*, which notice shall include at least a brief summary of the content of such publication and the price thereof.

III. That the Bureau secure for investigators any such publications at a price to be indicated in the *Bulletin*.

IV. That the Bureau endeavor so far as practicable, to secure official publications for investigators.

V. That the Bureau keep a record of the published progress of larger schemes of scientific investigations of Pan-American bearing.

4. That the universities supply their respective libraries with the official publications of Latin-American governments, and with the works of Latin-American authors, which will serve to elucidate the history and civilization of the Latin-American republics from the several standpoints of their geographical environment, their natural resources, their social conditions, their legal and political ideas, institutions, and practices, their industry and commerce, their systems of education and public charity, their scientific activities, their literature and their fine arts.

5. That the universities publish for distribution in Latin America a condensed statement of their respective courses of instruction, the cost of tuition and living, the conditions of student life, the facilities offered to Latin-American students in particular, etc. This statement should be printed in the language of the country to which it is to be sent. Furthermore, so as to present to Latin-American parents and educators a general idea of the advantages offered by American universities, and for the convenience of Latin-American students in determining their choice of a university, that it might be well to consider the feasibility of publishing such a statement jointly in a form more or less like that of the *Graduate Student's Handbook* issued some time ago in the United States.

6. That the universities make arrangements with the Latin-American universities through the International Bureau of the American Republics or otherwise for an exchange of their respective publications, including catalogues, bulletins of information, programs of study, and scientific periodicals issued under their auspices, and also for an exchange of duplicate works in their respective libraries.

7. That the universities assign to the teaching of Spanish a more important place in their curricula than has usually been accorded to it.

8. That the universities establish courses on the history of Spain and Portugal, and on the history, geography, and present condition of the Latin-American countries, with special reference to the relations between these countries and the United States.

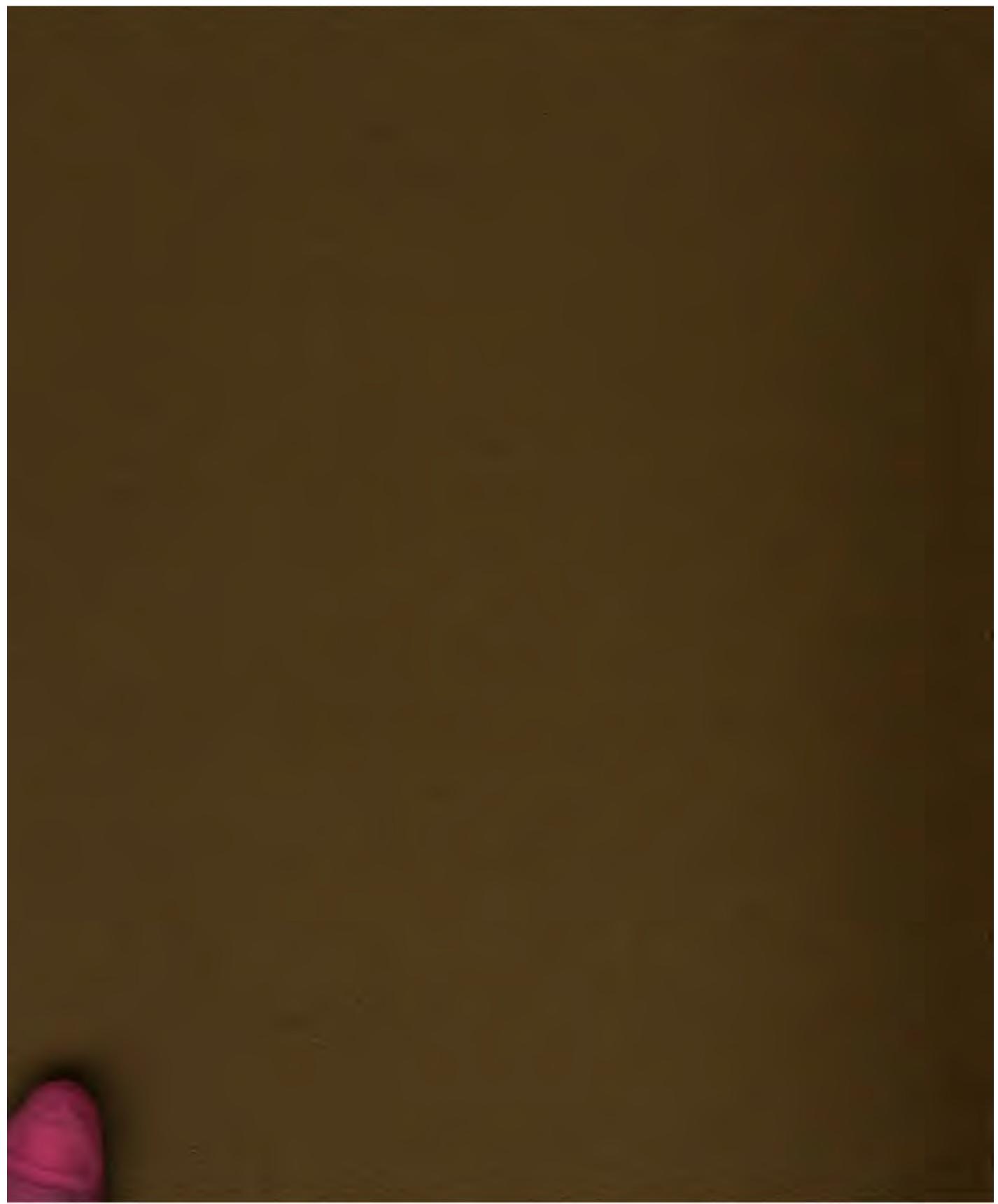
9. That the universities place themselves in contact with the representatives of American business houses which carry on an extensive commerce with the Latin-American republics, for the purpose of obtaining from such representatives by means of public lectures or otherwise information not otherwise accessible.

10. That from time to time the universities send members of their respective faculties on a tour of investigation in the Latin-American states.

11. That the universities make arrangements for inviting prominent leaders of thought in Latin America to lecture before them.

12. That the universities consider the practicability of providing eventually for an exchange of professors with Latin-American institutions.
13. That the universities endeavor to secure the establishment of special fellowships for the purpose of study and travel in Latin America.
14. That the universities endeavor to secure the establishment of special scholarships for Latin-American students.
15. That on account of the great variety of educational institutions in Latin America, and of the lack of uniformity in the grade and quality of their instruction, it is not advisable to adopt any general system of accrediting, under which students from Latin America may be admitted to universities in the United States.
16. That students proceeding from Latin America and proposing to study at universities in the United States be notified to take with them credentials including all available evidence of the quality of instruction which they have received, and of the grade or rank that they have attained; and that all educational institutions in Latin America, sending students to universities in the United States, be requested to furnish such credentials, and also to send to universities where their students propose to study complete information concerning the character and attainments of such students.
17. That the credentials of students from Latin America applying for admission to a university in the United States be referred to a committee of that university on the admission of students, and that this committee have power to supplement these credentials by a formal or an informal examination, whenever the information which they convey concerning the candidate may not appear to be adequate.
18. That to enable the candidate profitably to employ the whole period of his residence at the university, ability to read, write, and speak English on entering the university be always included in the minimum requirement for university standing.
19. That the universities receiving students from Latin America establish a list of subjects, proficiency in which shall be required for the admission of the foreign candidate, which may be printed in the statement referred to in the fifth recommendation above; and that in preparing this list the universities carefully consider the advisability of accepting subjects on which Latin-American educational institutions lay stress in their instruction as equivalents for subjects now required for entrance to universities in the United States.





*The ASSOCIATION
OF AMERICAN
UNIVERSITIES*

*The Eleventh
Annual Conference*

WILLIAM
MERRILL WENTWORTH
Emory Trustee and Trustee



*THE ASSOCIATION
OF
AMERICAN UNIVERSITIES*

1909 - 1910



The Association of American Universities

JOURNAL
OF
PROCEEDINGS AND ADDRESSES
OF THE
ELEVENTH ANNUAL CONFERENCE

HELD IN
MADISON, WISCONSIN
JANUARY 4 AND 5
1910

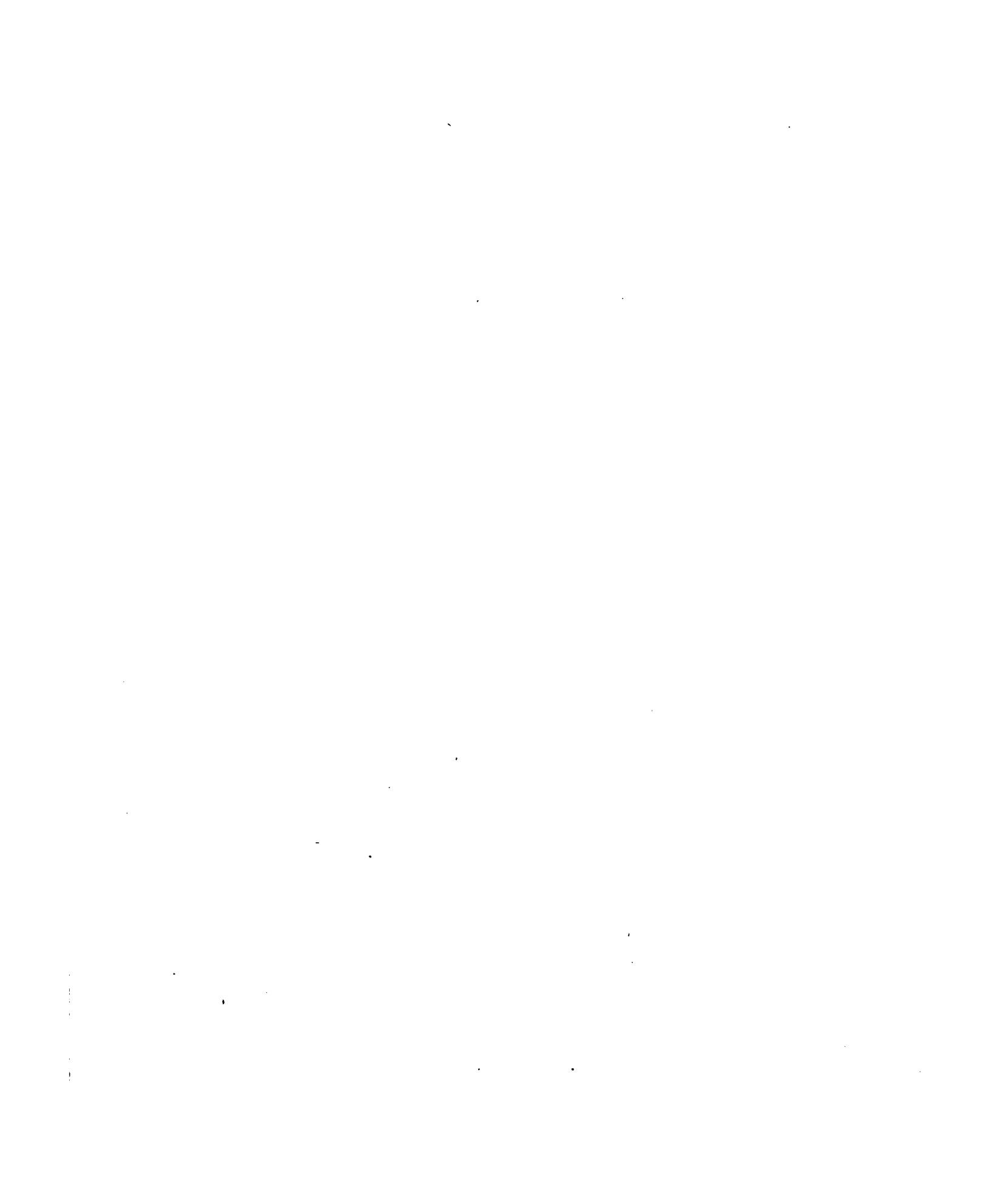
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CONTENTS

| | PAGE |
|--|-----------|
| MEMBERSHIP | 7 |
| CONSTITUTION | 9 |
| CALENDAR OF CONFERENCES | 11 |
| OFFICERS | 11 |
| PROCEEDINGS OF THE ELEVENTH ANNUAL CONFERENCE | 13 |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 13 |
| FIRST SESSION—MINUTES | 13 |
| SECOND SESSION—MINUTES | 14 |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 15 |
| THIRD SESSION—MINUTES | 15 |
| PAPERS AND DISCUSSIONS AT THE ELEVENTH ANNUAL CONFERENCE: | |
| THE FIRST SESSION: | |
| PAPER on " <i>The Problem of the Assistant Professor</i> ," by Mr. Marx | 17 |
| DISCUSSION by Mr. Van Hise, p. 46. | |
| THE SECOND SESSION: | |
| PAPER on " <i>University Extension</i> ," by Mr. Reber | 47 |
| DISCUSSION by Mr. Carpenter, pp. 63, 64; Mr. Reber, pp. 63, 64, 69, 71; Mr. Comstock, pp. 63, 64; Mr. Judson, pp. 64, 72; Mr. Van Hise, pp. 64, 68, 69, 70; Mr. Laughlin, pp. 66, 68; Mr. Lowell, pp. 68, 69, 71; Mr. Capps, p. 70; Mr. Reed, p. 70; Mr. Ely, p. 71; Mr. MacLean, p. 72; Mr. Haskins, p. 73; Mr. Fisher, p. 73; Mr. Loeb, p. 73. | |
| THE THIRD SESSION: | |
| PAPER on " <i>Position and Importance of the Arts Course as Distinct from the Professional and Semi-Professional Courses</i> ," by Mr. Wilson | 73 |
| DISCUSSION by Mr. Birge, p. 85; Mr. Van Hise, p. 86; Mr. Keppel, p. 87; Mr. Laughlin, p. 87. | |
| APPENDICES | 89 |
| FINANCIAL REPORT | 89 |
| REPORT OF THE SPECIAL COMMITTEE ON UNIVERSITY NOMENCLATURE | 90 |



MEMBERSHIP
OF
THE ASSOCIATION OF AMERICAN UNIVERSITIES

| | |
|------------------------------------|---------------------------------|
| UNIVERSITY OF CALIFORNIA, | Berkeley, California |
| CATHOLIC UNIVERSITY OF AMERICA, | Washington, D. C. |
| THE UNIVERSITY OF CHICAGO, | Chicago, Illinois |
| CLARK UNIVERSITY, | Worcester, Massachusetts |
| COLUMBIA UNIVERSITY, | New York, New York |
| CORNELL UNIVERSITY, | Ithaca, New York |
| HARVARD UNIVERSITY, | Cambridge, Massachusetts |
| UNIVERSITY OF ILLINOIS, | Urbana, Illinois |
| INDIANA UNIVERSITY, | Bloomington, Indiana |
| THE STATE UNIVERSITY OF IOWA, | Iowa City, Iowa |
| THE JOHNS HOPKINS UNIVERSITY, | Baltimore, Maryland |
| UNIVERSITY OF KANSAS, | Lawrence, Kansas |
| LELAND STANFORD JUNIOR UNIVERSITY, | Stanford University, California |
| UNIVERSITY OF MICHIGAN, | Ann Arbor, Michigan |
| UNIVERSITY OF MINNESOTA, | Minneapolis, Minnesota |
| UNIVERSITY OF MISSOURI, | Columbia, Missouri |
| THE UNIVERSITY OF NEBRASKA, | Lincoln, Nebraska |
| UNIVERSITY OF PENNSYLVANIA, | Philadelphia, Pennsylvania |
| PRINCETON UNIVERSITY, | Princeton, New Jersey |
| UNIVERSITY OF VIRGINIA, | Charlottesville, Virginia |
| UNIVERSITY OF WISCONSIN, | Madison, Wisconsin |
| YALE UNIVERSITY, | New Haven, Connecticut |

THE CONSTITUTION
OF
THE ASSOCIATION OF AMERICAN UNIVERSITIES
ADOPTED FEBRUARY 28, 1900

I. NAME

This organization is called THE ASSOCIATION OF AMERICAN UNIVERSITIES.

II. PURPOSE

It is founded for the purpose of considering matters of common interest relating to graduate study.

III. MEMBERSHIP

1. *Qualifications.*—It is composed of institutions on the North American continent engaged in giving advanced or graduate instruction.

2. *Initial Membership.*—Its initial membership consists of the following institutions:

University of California
Catholic University of America
The University of Chicago
Clark University
Columbia University
Cornell University
Harvard University
The Johns Hopkins University
The Leland Stanford, Jr., University
University of Michigan
University of Pennsylvania
Princeton University
University of Wisconsin
Yale University

3. *Election of New Members.*—Other institutions may be admitted, at the annual conference, on the invitation of the Executive Committee, indorsed by a three-fourths vote of the members of the Association.

IV. MEETINGS

The Association shall hold an annual conference at such time and place as the Executive Committee may direct.

*The Association of American Universities***V. PROGRAM**

The Executive Committee shall prepare a program for each meeting.

VI. OFFICERS

The officers of the Association shall be President, Vice-President, and Secretary.

These three, with two others elected by the Association, shall constitute the Executive Committee.

VII. VOTING POWER

In each conference, each university may have any number of representatives, but each university shall have a single vote.

VIII. LIMITATION OF POWERS

No act of the Association shall be held to control the policy or line of action of any institution belonging to it.

CALENDAR OF CONFERENCES

- FIRST ANNUAL CONFERENCE (organization),
Chicago, February 27, 28, 1900
- SECOND ANNUAL CONFERENCE,
Chicago, February 26-28, 1901
- THIRD ANNUAL CONFERENCE,
Chicago, February 25-27, 1902
- FOURTH ANNUAL CONFERENCE,
New York, December 29-31, 1902
- FIFTH ANNUAL CONFERENCE,
New Haven, February 18-20, 1904
- SIXTH ANNUAL CONFERENCE,
Baltimore, January 12-14, 1905
- SEVENTH ANNUAL CONFERENCE,
San Francisco, Berkeley, and Palo Alto,
March 14-17, 1906
- EIGHTH ANNUAL CONFERENCE,
Cambridge, November 23, 24, 1906
- NINTH ANNUAL CONFERENCE,
Ann Arbor, January 9, 10, 1908
- TENTH ANNUAL CONFERENCE,
Ithaca, January 7, 8, 1909
- ELEVENTH ANNUAL CONFERENCE,
Madison, January 4, 5, 1910

OFFICERS

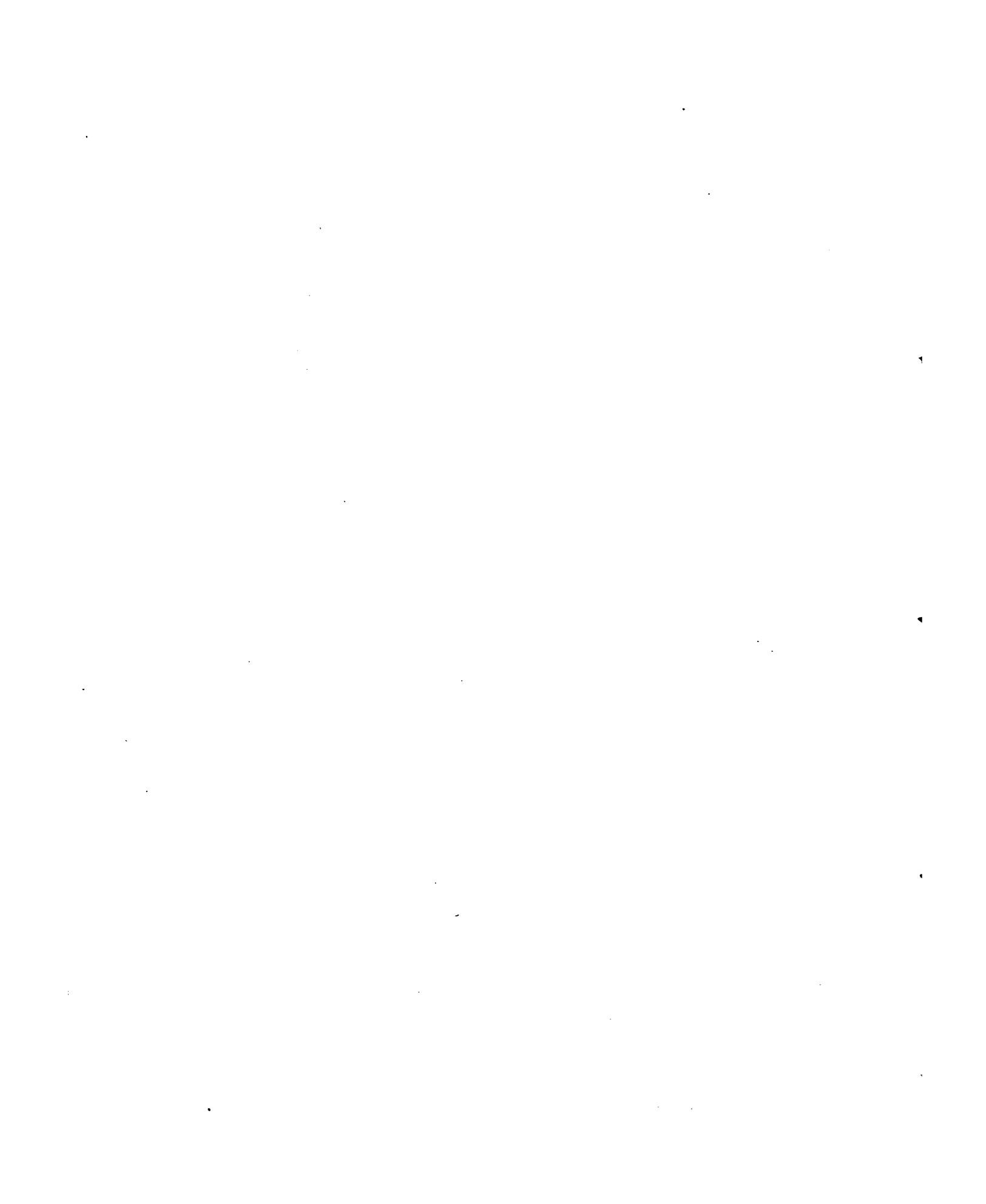
1910-11

President—The representative of University of Pennsylvania.

Vice-President—The representative of University of Wisconsin.

Secretary—The representative of Harvard University (to serve for a period of five years from 1908).

Additional members of the *Executive Committee*—The representative of Columbia University; the representative of University of Michigan.



THE ELEVENTH ANNUAL CONFERENCE

FIRST DAY'S PROCEEDINGS

TUESDAY, JANUARY 4, 1910

MINUTES

MEETING OF THE EXECUTIVE COMMITTEE

A meeting of the Executive Committee was held on Tuesday, January 4, 1910, at 9 A.M., in the State Historical Library Building.

There were present the following members of the Executive Committee:

For Princeton University, *President*—Mr. Wilson

For Harvard University, *Secretary*—Mr. Haskins

For Columbia University—Mr. Carpenter

It was voted to recommend to the Association that the **EXECUTIVE COMMITTEE** be authorized to arrange for reprinting the proceedings of the first six conferences.

The meeting adjourned at 10 A.M.

FIRST SESSION

The First Session was called to order in the State Historical Library Building, at 10 A.M., with Mr. Wilson, of Princeton University, in the chair.

The following representatives were present:

UNIVERSITY OF CALIFORNIA—Mr. Frederick Slate

CATHOLIC UNIVERSITY OF AMERICA—Mr. George M. Bolling

THE UNIVERSITY OF CHICAGO—Mr. Harry Pratt Judson, Mr. J. Laurence Laughlin, Mr. Rollin D. Salisbury

CLARK UNIVERSITY—Mr. Edmund C. Sanford

COLUMBIA UNIVERSITY—Mr. William H. Carpenter, Mr. Frederick P. Keppel, Mr. Munroe Smith

CORNELL UNIVERSITY—Mr. Charles Henry Hull, Mr. Ernest G. Merritt

HARVARD UNIVERSITY—Mr. A. Lawrence Lowell, Mr. Charles H. Haskins

UNIVERSITY OF ILLINOIS—Mr. Albert P. Carman

INDIANA UNIVERSITY—Mr. William L. Bryan

THE STATE UNIVERSITY OF IOWA—Mr. George E. MacLean, Mr. Carl E. Seashore

THE JOHNS HOPKINS UNIVERSITY—Mr. Westel W. Willoughby

UNIVERSITY OF KANSAS—Mr. W. H. Carruth

LELAND STANFORD JUNIOR UNIVERSITY—Mr. Charles H. Huberich

UNIVERSITY OF MICHIGAN—Mr. Harry B. Hutchins, Mr. John O. Reed

UNIVERSITY OF MINNESOTA—Mr. John F. Downey
 UNIVERSITY OF MISSOURI—Mr. Isidor Loeb
 THE UNIVERSITY OF NEBRASKA—Mr. Samuel Avery, Mr. Lucius A. Sherman
 UNIVERSITY OF PENNSYLVANIA—Mr. Herman V. Ames, Mr. George E. Fisher
 PRINCETON UNIVERSITY—Mr. Woodrow Wilson, Mr. Edward Capps
 YALE UNIVERSITY—Mr. Frederick S. Jones
 UNIVERSITY OF WISCONSIN—Mr. Charles R. Van Hise, Mr. Edward A. Birge, Mr. George C. Comstock, Mr. Richard T. Ely, Mr. Joseph Jastrow, Mr. Julius E. Olson, Mr. Louis E. Reber, Mr. Paul S. Reinsch, Mr. Harry L. Russell, Mr. William A. Scott, Mr. Charles F. Smith, Mr. Frederick J. Turner, Mr. Edward B. Van Vleck

The minutes of the preceding conference were approved as printed.

Upon recommendation of the Executive Committee the incoming Executive Committee was authorized to reprint the proceedings of the first six conferences of the Association.

Mr. Olson, of the University of Wisconsin, and Mr. Haskins, of Harvard University, were appointed by the chair to prepare reports of the meeting for the press.

The chair appointed the following Committee on Nominations:

Mr. Laughlin, representing the University of Chicago
 Mr. MacLean, representing the University of Iowa
 Mr. Willoughby, representing the Johns Hopkins University

Mr. Huberich, on behalf of Leland Stanford Junior University, presented a PAPER on "The Problem of the Assistant Professor," prepared by Mr. Guido Hugo Marx.

The paper was briefly discussed by Mr. Van Hise (p. 46).

The Session adjourned at 12 M.

SECOND SESSION

The Second Session was called to order at 2:30 P. M., with Mr. Wilson, of Princeton University in the chair.

Mr. Reber, on behalf of the University of Wisconsin, presented a PAPER on "University Extension."

The following delegates took part in the DISCUSSION: Mr. Carpenter (pp. 63, 64), Mr. Reber (pp. 63, 64, 69, 71), Mr. Comstock (pp. 63, 64), Mr. Judson (pp. 64, 72), Mr. Van Hise (pp. 64, 68, 69, 70), Mr. Laughlin (pp. 66, 68), Mr. Lowell (pp. 68, 69, 71), Mr. Capps (p. 70), Mr. Reed (p. 70), Mr. Ely (p. 71), Mr. MacLean (p. 72), Mr. Haskins (p. 73), Mr. Fisher (p. 73), Mr. Loeb (p. 73).

The Special Committee on University Nomenclature, appointed at the Ninth Annual Conference, submitted a supplementary report (see p. 90), and recommended the adoption of certain definitions, which after some modification in the course of the discussion were adopted, as follows:

- i. That the term "a group" be restricted to a combination of related subjects.

2. That the term "curriculum" be restricted to a combination of courses leading to a degree.
3. That the term "division" be used to indicate any organic portion of a university which is larger or more independent than a department, and which does not adapt itself to classification under the terms already adopted by the Association.

The Session adjourned at 5 P. M.

At 6:30 P. M., the delegates were entertained at dinner by members of the Faculty of the University of Wisconsin at the University Club. Dean Birge, of the University of Wisconsin, presided at the dinner, and brief remarks were made by Mr. Jones, of Yale University, Mr. Showerman, of the University of Wisconsin, Mr. Judson, of the University of Chicago, Mr. Bryan, of Indiana University, and Mr. Wilson, of Princeton University.

MEETING OF THE EXECUTIVE COMMITTEE

A meeting of the Executive Committee was held January 5, 1910, at 9 A. M., in the State Historical Library Building. The following representatives were present:

For Princeton University, *President*—Mr. Wilson
For Harvard University, *Secretary*—Mr. Haskins
For Columbia University—Mr. Carpenter

In response to a request of the Association of Cosmopolitan Clubs, the Executive Committee voted to report to the Association a resolution, favorable to the appointment of special faculty advisers for foreign students in the universities composing the Association.

In view of the fact that the FINANCIAL REPORT had miscarried in the mails, it was voted to recommend to the Association that the report be referred to the incoming Executive Committee, with power.

It was voted to recommend to the Association the acceptance of the invitation of the University of Virginia to hold the next meeting of the Association in Charlottesville.

The Committee adjourned at 10 A. M.

THIRD SESSION

The Third Session was called to order at 10 A. M., with Mr. Wilson, of Princeton University, in the chair.

Mr. Wilson presented a PAPER on "The Position and Importance of the Arts Course as Distinct from the Professional and Semi-Professional Courses."

The following delegates took part in the DISCUSSION which followed: Mr. Birge (p. 85), Mr. Van Hise (p. 86), Mr. Keppel (p. 87), Mr. Laughlin (p. 87).

It was voted that Indiana University be asked to prepare a paper for the next Conference upon the question of allowing credit for professional work toward the degree of Bachelor of Arts.

The Association of Cosmopolitan Clubs having requested the Association to consider

the appointment of a special faculty adviser of foreign students in American universities, the Association voted, on recommendation of the Executive Committee, to express its sympathy with the purposes of this resolution and to call it to the attention of the members of the Association, with the suggestion that they give it serious consideration and act on it where possible.

In view of the fact that the FINANCIAL REPORT for 1909 had miscarried in the mails, it was voted to refer the report to the incoming Executive Committee, with power.¹

Upon recommendation of the Executive Committee the Association accepted the invitation of the University of Virginia to hold the next meeting at Charlottesville. The Executive Committee was empowered to fix the time of meeting.

The Committee on Nominations reported as follows:

For *President*—The representative of the University of Pennsylvania.

For *Vice-President*—The representative of the University of Wisconsin.

For *Secretary*—The representative of Harvard University (appointed at the Ninth Conference to serve for five years from 1908).

For additional members of the *Executive Committee*—The representative of Columbia University; the representative of the University of Michigan.

The nominations of the Committee were approved, and the officers named were declared duly elected.

Upon motion, the following resolution was adopted:

Resolved, That the members of The Association of American Universities, in session at the University of Wisconsin, wish to express their cordial thanks to the authorities of that University for their hospitable reception and entertainment of the Association.

Upon motion, the Association adjourned at 11:50 A. M., to attend the University of Wisconsin Convocation, after which the delegates were entertained at luncheon at the residence of President Van Hise, of the University of Wisconsin.

¹ The Financial Report was approved by the incoming Executive Committee (p. 89).

THE ASSOCIATION OF AMERICAN UNIVERSITIES

PAPERS AND DISCUSSIONS DURING THE ELEVENTH ANNUAL CONFERENCE

FIRST SESSION

THE PROBLEM OF THE ASSISTANT PROFESSOR

PAPER PREPARED ON BEHALF OF LELAND STANFORD JUNIOR UNIVERSITY BY PROFESSOR
GUIDO HUGO MARX, AND PRESENTED BY PROFESSOR CHARLES H. HUBERICH

I

There has been for some years a growing appreciation among educational institutions of the fact that their problems are not entirely individual, but present many aspects in common, and that much good may come from joint effort toward their solution. The very existence of this Association sufficiently demonstrates this fact, and also amply justifies the aim of this paper. The topic offers material for a volume; the limitations of space and time for preparation have made the task of presentation chiefly one of selection and manner. The prime effort has been directed toward stating the problem of the assistant professor in concrete terms, and the method adopted may be likened to that of composite photography. Its limitations are obvious, but it has the advantage of focusing well on the main features, while enabling one to treat individual data without danger of personal identification.

A questionnaire (Appendix A) was prepared and sent out to approximately 250 of the men holding the rank of assistant professor in the 22 institutions represented in this Association. When replies had been received to about one-half (120) of these, the writer felt forced to begin his work of compilation, in order that in the time at his disposal he might complete the collation, and have a definite result to present in this paper. Replies have continued, but they run just about the same as those here considered, and in no manner call for any essential modification of the general results. Casting out replies of those whose service was but for part time and special in kind (chiefly those holding clinical positions with nominal salaries and slight administrative connection), there remained 112 replies from 20 institutions. The initial step was to tabulate the answers to the first 17 questions, and from that tabulation the following results were compiled. The first point is that of the present age of the men replying. Table I gives the result:

TABLE I
PRESENT AGE OF ASSISTANT PROFESSORS
(Two Replies Blank)

| Age | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 51 | 58 |
|---------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|-------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Number | 1 | 0 | 1 | 6 | 5 | 4 | 8 | 6 | 5 | 6 | 10 | 10 | 4 | 6 | 4 | 7 | 1 | 6 | 5 | 2 | 2 | 5 | 1 | 1 | 2 | 1 | 1 |
| Group 1 | | | | | | | | | | | | | Group 2 | | | | | | | | | | | | | | |
| 36 Median Age—52 under, 48 over | | | | | | | | | | | | | 24.6 per cent. of total | | | | | | | | | | | | | | |

Average Age 36.8 years

The average age is 36.8 years; 36 may also be considered the median age, as 52 of the men were under this age, while 58 were 36 years or older. Two did not state their age. Just here I wish to call attention to evidence offered by this table on an important point. The men fall into two main groups, one under 40 and one over 40. The existence of this second group (24.6 per cent. of the total) with ages running from 40 to 58, points decidedly toward the existence of a class of permanent assistant professors. This is an important matter, and must seriously modify the prevailing view that assistant professors are young men temporarily occupying the rank on their march toward full professorship. If this point be well taken—and the writer fully believes it to be so—an entire readjustment of attitude toward the assistant professor is due. Compensation based upon the old conception will be found inadequate, and old forms of faculty organization and departmental administration will be found unduly repressive and subordinating toward amply tried and experienced men.

Bearing further on this point of age is Table II, which shows the age at which these men attained assistant professorship.

TABLE II
AGE AT APPOINTMENT AS ASSISTANT PROFESSOR
(Five Replies, Age Not Given)

| Age | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 47 |
|---------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----------------------|----|----|----|----|----|----|----|----|----|----|----|
| Number | 2 | 4 | 1 | 6 | 12 | 9 | 10 | 8 | 10 | 10 | 6 | 6 | 7 | 4 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| Group 1 | | | | | | | | | | | | Group 2 | | | | | | | | | | | |
| 31 Median Age—52 under, 55 over | | | | | | | | | | | | 9½ per cent. of total | | | | | | | | | | | |

Average age at appointment 31.25

The average age of appointment is 31.25 years. The median age is 31, 52 being appointed at an earlier age than this and 55 at this or a later one. In considering some of the subsequent facts, it may be well to bear in mind that the years from 31 to 37 may properly be regarded as the cream of a man's life. "Who is not at twenty, does not at thirty, has not at forty, never will be, do, or have."

The average time spent in collegiate or graduate study has been 6.9 years. There are 17 men (15 per cent.) who hold the degree of Bachelor only; 28 (25 per cent.) hold none above Master; while 65 (58 per cent.) hold that of Doctor. Two only, whose work is in a special branch of technology, hold no degree.

There were 63½ per cent. who received assistance in pursuing their studies, in the form of scholarships, fellowships, teaching fellowships, assistantships, student-instructorships, etc. The amount varied from a single year's free tuition to a net equivalent of \$2,000. Those receiving no such aid numbered 36½ per cent.; 53½ per cent. incurred no indebtedness for their education; 46½ per cent. did incur such indebtedness, the average amount being \$885. Of those who incurred this indebtedness, 82 per cent. have discharged it. The average sum was \$800, and the average time required was 3.6 years. The remaining 18 per cent., whose debt averaged \$1,261, have not yet succeeded in paying it off, although in some cases it has been running six, eight, and even ten years. The depressing nature of such a burden need not be dwelt upon.

With the facts before him which these replies have brought, the writer is deeply impressed by the deplorable effect of the system of scholarships, etc., which do not entirely support the recipient, but act as bait and encourage him to go on with graduate study, while piling up an indebtedness which, under prevailing conditions, will ride his shoulders like a veritable old man of the sea. It is a good way to break hearts.

These histories disclose the fact that it is a pretty serious matter for a man to go even \$1,000 into debt in order to enter the career of university teaching. The *manipulation* of fellowships for the purpose of "building up a strong (i. e., large) graduate department" lies dangerously near the immoral; and this is doubly true when the fellowship carries with it burdensome teaching duties which make of it but a disguised, underpaid instructorship. This is making one hand wash the other in a way worthy of financial wizards. Nor can the practice of some professors of looking upon "their" fellows as a sort of intellectual valets be too strongly condemned. A genuine fellowship will carry sufficient stipend to bear the entire burden of the recipient's cost of living on a modest scale, leave his time wholly free for his studies, and will take its sole return in deferred service to be rendered to society at large.

We next come to the question of the professorial experience of these men. The total teaching service in all ranks averages 10.3 years. The median period is 9 years, just half having served a shorter time, and the other half a longer time than this. On the average they have served $5\frac{1}{2}$ years in the rank of assistant professor. Five years is also about the median period, 53 per cent. having served a shorter term and 47 per cent. 5 years or more. Of these, 12 per cent. have held the rank for ten years or more. This service is shown in Table III.

TABLE III
YEARS OF SERVICE AS ASSISTANT PROFESSOR
(One Reply Lacking)

Of the 112, 83 (74 per cent.) are married, and 29 (26 per cent.) are unmarried. Table IV shows the number and distribution of children in this group of men. No comment, beyond a reminder that the average age of these men is 36.8 years, is necessary.

TABLE IV

| | | NUMBER AND DISTRIBUTION OF CHILDREN | Total Children |
|---------------|-----------------|-------------------------------------|----------------|
| Number having | 0 child..... | 23 | 0 |
| " " | 1 " | 26 | 26 |
| " " | 2 children..... | 19 | 38 |
| " " | 3 " | 12 | 36 |
| " " | 4 " | 1 | 4 |
| " " | 5 " | 1 | 6 |
| " " | 6 " | 1 | |
| " " | 7 " | 1 | 7 |
| | | <hr/> 83 | <hr/> 117 |

117/83 = 1.4 to the family of each married man.

The present average salary is \$1,790. The median salary is \$1,800, 21½ per cent. receiving just this sum, 46 per cent. receiving less, and 33½ per cent. more. The average salary for the entire 10.3 years of teaching service is \$1,325. (An interesting check on this is the writer's average of \$1,328.15 for his first nine years of service, reported in the *Atlantic Monthly*, May, 1905.)

Now let us focus these facts into our composite representative man. At the age of 26 or 27, after 7 years of collegiate and graduate study, involving not only considerable outlay but also the important item of foregoing earning during this period, he is the proud possessor of his Ph.D. and is ready to enter his profession. The next 5 years he spends as instructor. In his thirty-second year he reaches assistant professorship. He is now in his thirty-seventh year, having been an assistant professor for 5 years. His average salary for the 10 years has been \$1,325, which compares favorably with that of the good mechanic, but scarcely with that of men in those trained professions requiring equally arduous and expensive preparation. At 37 he is married, has one child and a salary of \$1,800. These are men in 20 of the leading universities, located for the greater part in or near the larger cities!

An average salary of \$1,325 for the years of a man's life between 27 and 37 is scarcely one to favor a broadening contact with life, the purchase of books, travel, association with cultivated men outside of academic ranks, etc. The most that can be said is that it may suffice for an unmarried man with no one dependent upon him. But three-fourths of these men are married. Says one of these: "Previous to marriage salary was sufficient to keep me comfortably. Since marriage, *in spite of* keeping boarders, I have fallen behind."¹

¹ Compare President Eliot: "he should receive [on appointment] as assistant professor a salary which will enable him to support a wife and two or three children comfortably, but without luxuries or costly pleasures. It is well to have the appointment of assistant professor given for a fixed term of years, as, for example, five. If, at the end of his first term as assistant professor, a second appointment with the same title be given, a moderate advance of salary should accompany the second appointment. By the time the end of a second term as assistant professor is reached, the candidate for further employment in the university will be approaching forty years of age, and is ready for a full professorship" (*University Administration*, p. 13). The age of appointment averages 31.25 years. Two five-year terms bring him to 41.25.

It is therefore not at all astonishing to find that 80 per cent. have supplemented their salary with income from outside sources. No complete average can be struck, as the replies included such answers as "to a considerable extent," etc. The amount when stated (as it was in 75 cases) varied from a sum of \$15 total to an independent annual income of \$10,000 and averaged 28.7 per cent. of the salary. Omitting two exceptionally high cases, it was about 25 per cent.

The necessity to supplement the salary with outside income is evident from the fact that eight men report themselves running behind even on total income, while practicing strictest economy. Light is thrown on the question, and on that of standard of living, by the following replies to the query whether the total income was sufficient, or whether they were running behind. The answers are here set down exactly in the order of the tabulation:

"Running even, with aid of fortunate real-estate venture on borrowed capital. Felt forced to do this." "Salary alone would not suffice to cover expenses of living with any manner of comfort." "Sufficient" (has private capital). "I keep even, but could not do it on my salary." "Can barely make both ends meet now" (in debt \$1,000). "Ends compelled to meet under present method of living." "When debt incurred for study is paid, I think my income will do a little better than make both ends meet." (It would be cruel to shatter the hope. This is a young man, recently married, no children.) "Sufficient" (unmarried, supplements salary 25 per cent.). "Annual saving \$500 on close living" (supplements salary 12 per cent.). "Must depend on outside sources." "Total just sufficient" (married, 3 children, salary \$2,400). "Sufficient" (recently married). "Have had to earn outside to make income equal expenses." "Barely sufficient" (married, no children). "Running behind; \$1,000 insurance recently abandoned, from inability to meet premiums" (married, 2 children, net indebtedness \$1,094.70). "Just even, with aid from other sources." "If I can keep expenses practically stationary, expect to pay debts in 7-10 years" (present indebtedness \$2,053.50). "Both ends meet" (married, no children). "Have kept even, owing to remarkable freedom from sickness in family and to consistent self-sacrifice on the part of my wife." "It is against my principles to run behind, but neither can I get ahead on present salary (\$1,350) nor furnish necessary books and equipment to make my time count as it should." "Barely sufficient" (married, no children). "Can now make ends meet with difficulty." "Running behind a little" (present indebtedness \$2,500). "Sufficient" (unmarried). "Ahead" (married, no children). "Spend about \$1,000 annually, and count on trip abroad every second or third year" (widower, no children). "Running behind on salary alone, but owing to outside sources of income I am saving a little." "Both ends meet" (unmarried). "Saving a little" (unmarried). "Always manage to live within my income." "Saving" (unmarried). "Even only" (15 per cent. supplemental income). "Both ends meet." "Just about keeping even" (33 $\frac{1}{3}$ per cent. supplemental income). "Save \$400 a year. Saved as much in 1893 on a salary of \$1,000 as now on \$1,700" (a marked case of success in maintaining a standard of living proportionate to income; not a college graduate). "Ends meet only by sacrificing many things we should have." "Sufficient" (unmarried). "Income from other sources makes ends meet. Debt of salary to other funds is considerable. I don't know how much." "A little more than sufficient, *as we live*." "Sufficient, by tight squeezing." "Ends meet; not able to save since child was born." "Wife's income about \$3,000; own income would be insufficient at scale of living we have adopted." "Live modestly to make both ends meet" (married, no children, salary \$2,000). "Being unmarried, I am saving a little." "Both ends meet" (unmarried). "Getting ahead a little, due entirely to outside income." "Except for my income from other sources, I could not live in a large city. But for additional income, my indebtedness would be crushing." "It's just got to be

sufficient" (married, 3 children, \$500 in debt). "Saving" (salary \$2,500, private income \$1,500). "Sufficient" (unmarried). "Sufficient" (married, no children, salary \$2,600). "Sufficient" (unmarried). "Saving" (married, one child, salary \$2,000, professional income now \$1,300). "Sufficient, but now close to the line" (married, 2 children, total income \$2,000-\$2,100). "Manage with great economy to make ends meet" (married, no children). "A struggle to make both ends meet" (married, 2 children). "Sufficient" (salary \$3,000, 30 per cent. supplemental income). "University salary is made to meet living expenses, not including any indulgence in luxuries or summer pleasures." "Barely making both ends meet" (unmarried, salary \$1,100). "Meet expenses, but not living as one in my position should" (married, 3 children, salary \$1,200, supplemental income \$120 a year). "Even" (married, no children). "Slowly gaining" (married, no children, salary \$2,000, supplemental income about 10 per cent.). "I make both ends meet with difficulty" (\$250 in debt). "Just enough by strict economy." "Wife and self have independent income. Salary absolutely insufficient for any but single man living with strict economy." "Almost but not quite meet expenses with regular college salary" (married, no children). "Salary decidedly insufficient to live according to dignity of profession." "Since marriage I have fallen behind." "Am making both ends meet, but it costs self-denial in buying books, etc." (married, no children, salary \$1,200). "Salary would not support even my small family in ——. Saved a little when I wasn't teaching."

And about forty more replies of the same tenor.

To complete the picture of the present financial status of these men: 17 men show an average net indebtedness of \$1,019. The details are given in Table V.

TABLE V
TABLE OF NET INDEBTEDNESS

| | Amount | Single | Married | Children |
|---------|--------------------|----------|-----------|-----------|
| 1..... | \$2,000.00 | .. | I | I |
| 2..... | 1,000.00 | .. | I | I |
| 3..... | 175.00 | .. | I | 0 |
| 4..... | 2,100.00 | .. | I | 3 |
| 5..... | 1,094.70 | .. | I | 2 |
| 6..... | 2,053.50 | .. | I | 2 |
| 7..... | 150.00 | I | .. | — |
| 8..... | 650.00 | .. | I | 0 |
| 9..... | 2,500.00 | .. | I | I |
| 10..... | 700.00 | I | .. | — |
| 11..... | 500.00 | .. | I | 3 |
| 12..... | 150.00 | .. | I | 3 |
| 13..... | 250.00 | I | .. | — |
| 14..... | 200.00 | I | .. | — |
| 15* | 600.00 | I | .. | — |
| 16..... | 1,500.00 | .. | I | 0 |
| 17..... | 1,700.00 | .. | I | 3 |
| | \$17,323.20 | 5 | 12 | .. |

* Parents

Average \$1,019

An average saving from salary of \$1,765 is shown by 43 men. The details are shown in Table VI. (From this table have been omitted two cases reported of saving from business ventures—one of \$15,000 and one of \$30,000.)

TABLE VI
SAVINGS FROM SALARY

| | Amount | Single | Married | Children | Remarks |
|------------|-------------|--------|---------|----------|---------|
| 1..... | \$2,000.00 | I | .. | - | |
| 2..... | 400.00 | .. | I | o | |
| 3..... | 2,500.00 | .. | I | 1 | |
| 4..... | 1,000.00 | .. | I | o | |
| 5..... | 300.00 | I | .. | - | |
| 6..... | 200.00 | .. | I | 1 | |
| 7..... | 600.00 | I | .. | - | |
| 8..... | 1,500.00 | .. | I | o | |
| 9..... | 500.00 | I | .. | - | |
| 10..... | 2,000.00 | I | .. | - | |
| 11..... | 500.00 | .. | I | o | |
| 12..... | 1,800.00 | I | .. | - | |
| 13..... | 800.00 | .. | I | 1 | |
| 14..... | 7,000.00 | .. | I | 3 | |
| 15..... | 800.00 | .. | I | 2 | |
| 16..... | 2,500.00 | I | .. | - | |
| 17..... | 1,200.00 | .. | I | 3 | |
| 18..... | 650.00 | .. | I | 1 | |
| 19..... | 1,000.00 | .. | I | 1 | |
| 20..... | 1,500.00 | .. | I | o | |
| 21..... | 2,000.00 | I | .. | - | |
| 22..... | 3,000.00 | I | .. | - | |
| 23..... | 7,000.00 | .. | I | o | |
| 24..... | 5,000.00 | I | .. | - | |
| 25..... | 3,500.00 | .. | I | 2 | |
| 26..... | 300.00 | I | .. | - | |
| 27..... | 750.00 | .. | I | o | |
| 28..... | 4,000.00 | .. | I | o | |
| 29..... | 6,000.00 | .. | I | 7 | |
| 30..... | 1,000.00 | .. | I | 0 | |
| 31..... | 200.00 | .. | I | o | |
| 32..... | 500.00 | .. | I | 2 | |
| 33..... | 300.00 | .. | I | 2 | |
| 34..... | 2,000.00 | I | .. | - | |
| 35..... | 710.00 | .. | I | 1 | |
| 36..... | 1,200.00 | I | .. | - | |
| 37..... | 400.00 | .. | I | o | |
| 38..... | 400.00 | I | .. | - | |
| 39..... | 1,150.00 | I | .. | - | |
| 40..... | 300.00 | .. | I | o | |
| 41..... | 1,250.00 | .. | I | 2 | |
| 42..... | 700.00 | I | .. | - | |
| 43..... | 5,500.00 | .. | I | 2 | |
| Total..... | \$75,910.00 | 16 | 27 | | |

Average \$1,765

The remaining 52 report themselves as just even or make no comment. If we subtract the reported total deficit from the reported total saving from salary and divide by 112, the number of replies received, the average net saving per man for 10.3 years' teaching service is \$559.

There are 25 who carry no life insurance; 86 carry an average of \$4,831. With a grim humor, one man who carries \$6,000 insurance comments: "I seem to be worth more dead than alive." Nine report accident insurance in addition, an average of \$4,445.

The table of savings from salary is scarcely less significant than that of deficits. Surely no demonstration is needed that the present scale of salaries in this rank is only sufficient to provide a modest living for a single man. Remember that the average salary during the ten years of service has been but \$1,325, and the present salary for men of 37 years of age averages \$1,800. The married men must supplement their income as best they may to make both ends meet—the salaries are insufficient to do it, on the scale of living demanded of them by their position and training.

Such divided efforts cannot fail to affect, not merely their further development, but their continuing efficiency. This problem of salaries is grave, and the possibility of readjustment worthy of most serious consideration by the administrative authorities. Particular attention may be called to the need for special consideration of those men in this rank who have passed their fortieth year—the possibly existing class of permanent assistant professors.

The rapid increase in the cost of living in the past twenty years has made the situation acute; for there has been no general increase of salaries commensurate with this, and as a consequence these men find themselves driven to a lower and lower standard of living. This is a grave menace to the efficiency of the institutions, both present and future, for it must not be forgotten that the higher ranks must be recruited from time to time from men whose development has necessarily been limited by the conditions surrounding this rank.

We now pass to the second division of our subject, which because of its somewhat broader aspects requires a slightly different mode of presentation.

Questions 18, 19, and 20 were prepared with a view to elicit information upon the extent of academic freedom and of participation in the solution of university problems enjoyed by assistant professors.

Says President Eliot in his most valuable and suggestive *University Administration*:

For determining the educational policy of a seat of learning, the faculties are the most important bodies in the entire institution. . . . It devolves upon the faculties . . . to discern, recommend, and carry out the educational policies of the institution. . . . Membership in a faculty should therefore be limited to professors, associate professors, and assistant professors, and to those instructors who have received appointments without limit of time. . . . It is of the utmost importance that every faculty contain enough young men to bring forward in debate the views and feelings of the recent college generations. To have its administration fall chiefly into the hands of elderly men is a grave misfortune for any institution. There is always good work that veterans who retain their physical and mental alertness can do; but the control of a university's policy should not be confided to them alone. . . . By the vitality, inventiveness, and enterprise of its faculty, it is safe to judge any institution of learning.

President Hyde, in his refreshing paper on "Personality and College Professors" (*The Outlook*, August 21, 1909, pp. 931-37), adds to this:

Because, in an experience of twenty-four years, I have seen 95 per cent. of all administrative reforms advocated and accomplished by men under thirty-five, I heartily endorse President Eliot's principle of juniority as the distinguishing mark of a progressive as distinct from a stagnant institution.

The three university presidents, of those not now in service, who have exerted the greatest formative influence upon the modern American university, are Presidents Eliot,

Gilman, and White. The first took up his presidential duties at Harvard at the age of 35; the second at California at the age of 41, and at Johns Hopkins at 46; the third at Cornell at 35.

In view of the foregoing facts, the extent of participation by men of 37 in the direction and control of educational policies of the several universities, disclosed by the following typical answers, is enlightening. The replies were formulated from a few more than a hundred received from 20 institutions. Unless otherwise stated, three or more answers were received from the institution. A composite reply is arranged, to give the range of replies from each individual institution, as representing the point of view of the assistant professor. Query 18a was:

What are your opinions concerning the status of the assistant professorship in sharing in the determination of general policies of your institution?

The replies:

1. "The policies of the university are really shaped by the President." "Assistant professors have a vote in the council, just as the full and associate professors have. They do not often initiate movements or policies, but have the full right of discussion, voting, etc." "Nothing more to be desired."
2. "Assistant professor has status a little above janitor." (Less than three replies.)
3. "Fairly satisfactory here." "They should have a full share in administrative and departmental policy, because unless they have such a share, with its responsibilities and the recognition resulting from it, the better part of their experience, idealism, and progressiveness is wasted."
4. "Fairly satisfactory." (Less than three replies.)
5. "Satisfactory." "They have as much influence, nearly, as full professors." "They have little share in the determination of general policies."
6. "There are no differences [between assistant and full professors] in these matters." (Less than three replies.)
7. "Very little direct influence at present." "He has a seat and voice in his college faculty, but not in the general university senate." "Not much share."
8. "Have a vote in faculty meetings." "Share but slightly in the determination of general policies." "Only through suggestions to the head of the department." "General policies are determined largely in meetings of the faculty heads of departments."
9. "No voice whatever in determining institutional policies." "At present assistant professors have no share." "None."
10. "Very little." "Mostly in hands of the deans." "Think assistant professors little less powerful than full professor. Believe a suggestion from either would be considered by the administration with equal care." (Note inference to be drawn from this last sentence. A side-light is thrown by the volunteered statement of one who left this institution for a larger one: "Conditions in this respect were highly unsatisfactory at _____.")
11. "Not being member of council, cannot answer." "Believe most assistant professors to be of ripe enough age and sober minded enough to give some good ideas." "No discrimination save in excluding new assistant professors from council for three years." "It is all it should be."
12. "Almost no share." "Has little influence; mostly done by older men." "Mostly in hands of heads of departments. Here the 'elder statesmen' are in control."
13. "As a rule, given altogether too little say." "Is given no say in policy of institution." "Should

be heard in regard to such questions." "Has a vote in all faculty actions." "When a division is called for in faculty meeting, professors have two votes, assistant professors one vote, and instructors no vote."

14. "Satisfactory in all respects. Depends entirely on his individual ability." "As to general policies, all assistant professors have a vote, as well as professors and deans, in the council."

15. "Left to heads of departments." "Incidental [share] only." "Should be given full vote on questions pertaining to institution policy." "The assistant professors are members of the general faculties in which they teach."

16. "Should have a vote in all matters submitted to members of the institution." "I am in the council which determines the policy. Am elected by confrères below rank of clinical professor. Other assistant professors are members of the 'faculty,' which is without power of initiative." (Less than 3 replies.)

17. "My share is as large as that of the average full professor." "In my case I can see no difference between assistant and full professors in this respect." "We enjoy all the privileges of full professors, but receive smaller salaries. It seems to me that is about the only distinction here."

18. "Depends upon personality and attainments of the assistant professor." "They have a great deal of influence here with us, and vote in faculty and committee meetings just as full professors do." "Perfectly satisfactory."

19. "An appropriate share." "Have votes on all questions in faculty meetings and serve on many important committees."

20. "No influence." "General policies are determined entirely by the full professors."

The foregoing replies show considerable range of institutional policy. Taken with their contexts (necessarily omitted here) they also disclose a prevailing conception of a faculty as a body scarcely so important and influential in its functions as the ideal quoted from President Eliot at the beginning of this section. In this light, such apparently discrepant answers as, for instance, those grouped under institution 5, fall into harmony, and so interpreted would mean that the faculty as a whole bears but small part in shaping policies, but in that part the assistant professors have nearly the influence of the full professors.

Our next query is directed at one of the most sensitive points in the present-day university organization—the status of the assistant professor in sharing in the determination of departmental policy, curriculum, and assignment of courses. The replies are grouped by institutions, although, under the prevailing system of departmental organization with permanent heads possessing ill-defined powers, it is natural to expect greater variations within the individual institutions, according to the interpretation of their duties by the various department heads. Query 18b, replies:

1. "The head has absolute power." "According to the disposition of the head of the department." "Departments vary in this university. In some it is done by conference and general meetings. In some (—, e. g.) we are called upon occasionally for suggestions in writing, all decisions resting with the head of the department. We have had about three department meetings in fifteen years. We get in writing our assignment of courses and hours from the head of the department." "Departmental policy (— department) very democratic. Majority of questions determined by vote of entire department. Individual wishes consulted wherever feasible."

2. "Is consulted about only his own courses." (Less than 3 replies.)

3. "Fairly satisfactory."

4. "Satisfactory in my department." "Very pleasant relations with the head of department." (Less than 3 replies.)

5. "Considerable, but (in general) insufficient share." "They have little to do with it. The system of departmental headship is to blame for this. This is the most detrimental arrangement within our universities at present." "Unsatisfactory. Too much power is centered in the head of the department. The assistant professor given little chance to influence departmental policy." "Have been practically full professor except in salary."

6. "No difference [between assistant and full professors] in these matters." "Should have an advisory capacity, but determination of course of conduct should be in hands of heads of departments." (Less than 3 replies.)

7. "Not much share." "He is usually consulted, but there is no formal obligation to consult him." "In our department, the assistant professor is an important factor in all departmental policies, and helps form these policies." "A large share."

8. "In departmental policy more attention is paid to his suggestions [than in general policy]." "My opinions are given careful consideration." "Have great range of liberty. The professor is one of the best in this regard that I ever knew." "Departmental policies in the —— department at present determined by the two heads. Have poor opinion of any two-headed arrangement." "Such things should be determined by conference of all members of the departmental staff."

9. "Good in some departments, poor in others." "Share to a very limited extent." "Am freely consulted by the head of the department relative to all matters of departmental policy." "Should have a vital part." "Should be consulted."

10. "No share." "Voted upon in general faculty meetings." "An equal voice, almost, as to departmental affairs. Great freedom in expression of opinions, etc." "We are very democratic in the department." "Should be consulted, and, I believe, is here."

11. "Depends upon the department." "Not given enough responsibility to give them an active interest in the administrative work of the institution, or to encourage loyalty to it." "Should have voice in planning work and get just recognition for what they do." "Suggestions have been received for all they were believed to be worth—perhaps not all I thought." "I have as much voice in these matters as if I were a full professor." "Well off in this respect." "All it should be." "In——department conditions practically ideal."

12. "Its influence felt a little, but not much." "Very little; not consulted at all." "Influence in proportion to favor enjoyed in eyes of head of department."

13. "Shares none too much." "Very little say." "Should be heard in regard to such questions." "Should be subject to the head of department." "In —— department, have a voice determining departmental policy." "Too many professors think they should have sole control. 'Their policies might be disrupted.'"

14. "In the large departments his influence is small in determining [these matters]; in small departments he very often takes the place of the professor or head of the department in this line of work. In many cases has entire charge of department and is assistant professor in name only." "I have independent charge of [my field]." "In our department we have voice in the determination of the nature of the work." "The professor of —— here decides all matters of departmental policy, curriculum, and assignment of courses."

15. "In my department the head makes his own policies and assigns courses, but in some departments the assistant professors are consulted." "Suggestive share." "Should be consulted and allowed to help in this part of work."

16. "Should be consulted in the same way as any full professor not head of the department, and should have a vote in all matters submitted to vote of members of department." (Less than 3 replies.)

17. "No difference here in these matters between assistant and full professors."

18. "They have a great deal of influence here." "Am running the department pending a future

policy to be settled in which I have some voice. In other departments assistant professors have advisory functions and are given considerable freedom on the average." "We have some voice—yet the dean has things about his own way." "Share equally with full professors." "Perfectly satisfactory."

19. "Depends largely upon the department head. In my own department the assistant professor is treated on his merits as a man and has as much influence as he deserves. This is not true in many other departments." "Seldom consulted." "Has a full share in departmental matters." "Made to feel that he has a voice in the government of the university and much at stake in his own department." "In general the assistant professor's position in these matters is entirely satisfactory."

20. "In general, little or none." "Much influence in departmental policy."

On the whole, these results, while showing more free participation in departmental than in general university matters, still disclose a state of affairs far from generally democratic.

The next query (18c) was in regard to the freedom enjoyed by the assistant professor in the conduct of individual classes. Here the replies are much more uniform, disclosing, in general, a gratifying condition of entire freedom, within the limitations necessarily imposed by correlation of departmental work. There is, however, a plentiful sprinkling of "Should have control," which sounds as if the wish rather than the possession were father of the thought; and also others, of which the following are selected as typical:

"None." "Given, usually, freedom in conduct of my classes." "A marked tendency on part of head to urge his own methods." "The professor of _____ decides the texts to be used and the amount of work to be covered." "The presence of his superior in the room (as is the case in some departments) overseeing his work is, to express it mildly, damnable." "In general, not enough freedom is allowed in those courses which require several sections taught by several men." By way of variety, one reply suggests: "Possibly less freedom and more supervision in some cases might be better."

The aim of query 19 was to disclose the conditions of nature and amount of work required, and whether these reasonably favor carrying on advanced work and intellectual growth. Eleven blank or non-committal replies were received. Exactly 50 reported conditions from "reasonably" to "extremely" satisfactory. Conditions were reported by 51 as unsatisfactory for one or more of the following reasons: excess of elementary work; correcting exercises; preparation of laboratory material; committee work; inadequate equipment or library; heavy schedule of instructional work; lack of presence and inspiration of advanced students; and pressing need to spend all available time in supplementing salary.

The actual amount of scheduled work seldom ranged below 10 hours, while as high as 18 appears to be the rule at some of the institutions; as high as 20 is reported, and 15 is not uncommon. Here are a few typical, significant replies:

"Have ideal research position." "So many do not take advantage of the existing opportunities that I should suppose a reduction of routine duties would not be of advantage to the university." "Conditions not favorable to research beyond that necessary to do teaching well." "Have had almost no time for past five years for research or investigation." "Nights, holidays, and vacations must be used for advanced work instead of recreation." "An excess of work is not forced upon us, but it is at hand, and the conscientious man does it to the detriment of his own studies." "It is only by working to the limit that I am able to

carry on any research work." "The nature and amount of work demanded of me have made me deem it necessary to aim at good teaching. This has been favorable to intellectual growth but not to research." "The heaviest part of the burden of routine teaching work is borne by those below the rank of professor. There is, however, good opportunity for research and advanced work, if one could be relieved of the awful feeling of lack of material provision for the future, and of family responsibilities not adequately met in the present."

The twentieth question was: What are the conditions governing tenure of the assistant professorship, and are they the best for reasonable independence of thought and action? Typical replies are here grouped, not according to individual institutions, but according to the seven prevailing systems of tenure. In the outset it should be stated that, judging by the entire lack of mention of such in the replies, influences upon tenure from outside the university are gratifyingly non-existent.

1. No fixed policy.

"We have no fixed policy. Would be more satisfactory to plan for the future with more certainty."

2. Indeterminate. Continued from year to year.

"A man's tenure depends upon his worth." "Assistant professors are not supposed to have independence of thought and action. They are treated as mere assistants just out of college." "Wholly dominated by head of department." "I believe in some cases the institution might be better served if there were not so much independence of thought and action indulged in."

3. Annual appointment.

"The tenure of office depends, if I mistake not, on the wishes (1) of the head of the department and (2) of the president. The actual appointment is for the year only. The condition is unfortunate. It cannot tend to independence of thought and action, but only the reverse. It cultivates subservience, toadiness. Its ill effect is intensified by the fact that the assistant professor has no open market in which he may offer his wares; an 'agreement in restraint of trade' virtually exists among leading universities." [?] "The under men are at the mercy of the head of the department, and must submit to any treatment if that head is autocratic or overbearing. Some heads keep their men reminded that they may lose their positions." "Until . . . I cringed and trimmed and was not half a man in my own esteem. I know dozens who are fawning because they feel it necessary." "One cannot know whether he is to be dropped out at the end of the year or not. To establish anything like a permanent home seems out of the question." "I think that a 3- or 5-year term would be preferable, but, if the president is a competent person, I do not regard the matter of great importance." "Continuance in position and promotion are automatic, provided incumbent's efficiency is reasonably maintained." "All that should be asked for."

4. Three years.

"Reasonable for a first term." "Just a little better than 1-year tenure." "This seems to me reasonable and fair and theoretically most stimulating for good work." "I am inclined to think that, for one thing, under the three-year tenure worry over future possibilities more than offsets any advantage of stimulus to do good work as means of retaining position." "Conditions by no means best. When I lost out at —— I had a contract with the president and regents for three years, and two of these years were yet before me. It was a deliberate breach of contract. . . . I was never allowed to face my accusers, nor do I know who they were. When I expostulated with the dean, he bullied me. I am not a fighter and could not stand up for myself. He literally bullied me out of the University. . . . The moral shock of this experience I never shall recover from." "I know of no restrictions on thought and action except in a few departments, the heads of which are inclined to be domineering." "In my institution the assistant professor is theoretically independent, having (after three years) an equal voice in the council and the department. Practically,

however, he is dependent on the good will of the head of the department. In the two vital matters of salary and promotion he has no personal access to the president, with whom the formal initiative rests, but is obliged to depend upon whatever representations the head of the department may choose to make. The latter's written recommendation is necessary to promotion, and his report is indeed the basis of all action taken by the president in reference to an assistant professor." "It would seem that the work of the assistant professor should be estimated by more than one person (usually the head of the department), and that some systematic method should obtain, by which the appointing and promoting powers should be made acquainted with this work from more than one point of view." "I should say they are here what they are everywhere else: making oneself generally agreeable and setting up no opposition to superiors. Thus are fostered obedience, patience, self-control, submergence of self—all cardinal virtues. Independence of action is not for the assistant professor—his 'thoughts' are his own." "In my experience the conditions are not the best for independence."

5. Four years.

"It is a temporary appointment for four years, and hence in a few cases operates to suppress independence of action and thought, though in most cases I see no such difficulty. Tenure usually depends on good work and usual standards of conduct."

6. Five years.

"Appointments for term of five years each; ordinarily leading to a professorship at the end of the second. There is entire independence." "Tenure dependent upon 'making good.'" "Have had no anxiety about reappointment." "Fact of reappointment being uncertain even though probable, militates against absolute independence of thought and action."

7. Permanent (sometimes after probationary term).

"Utmost freedom." "Removal for cause only." "If I understand the conditions, they are: Good behavior, efficient teaching, and reasonable intellectual growth. If this is correct, I think they are the best possible."

No comment is necessary, beyond calling attention to the fact that undue subordination is destructive of the character of both subordinate and superior; and conditions which tend to foster it should be tolerated no longer than it will take to get rid of them.

So much for the existing conditions as viewed by the assistant professors. We may compare our impressions from their conclusions with this by President Eliot (*University Administration*, pp. 98–99):

The young American who chooses a university career must then abandon all expectation of riches, and of the sort of luxuries which only wealth can procure. What he may reasonably expect is a secure income, a life-tenure, long vacations, the gratification of his intellectual tastes, good fellowship in study, teaching and research, plenty of books, and a dignified though simple mode of life.

We now turn to their suggestions concerning the problem of the assistant professorship, looking toward higher individual or institutional efficiency. These have been grouped as well as may be under separate headings, and the most revolutionary one is here given the place of honor:

i. Abolish the assistant professorship.

"Let the instructor be a temporary appointee. After he has clearly proven his ability let him be appointed to a professorship. The instructor should have little or no voice [in administrative matters or those of educational policy] while all the professors should be on an equality."

2. Appointment.

It is urged that the dignity of the position could be increased by the exercise of greater care in appointment, that the aim should be to get good men and then to give them plenty of opportunity for development, holding them responsible for results; and not to be overparticular about degrees and publications. There is nothing very radical here.

3. Clear understanding of status.

Policies should be well known, clear cut, and loyalty insisted upon; these men wish to co-operate and to that end desire that they be given the confidence of their seniors, and not be kept intentionally in the dark as to the possibilities of their position or the scope of their work. "Each man (president, professors, instructors, etc.) should have a better understanding with all his associates as to what specific purpose in the world he is trying to accomplish, and in what details he is responsible and in what details only an agent. The whole to be open and above board."

4. Facilities.

In addition to such criticism of limitations of library or lack of equipment from which all members of the staff suffer alike, the assistant professor feels that his needs of office and research room and occasional clerical or stenographic service are overlooked.

More serious than this is the complaint that he has no voice in making up the department budget and that, as a consequence, serious injustice is sometimes done his classes and himself by an indifferent or unfriendly head of department. In the following quotation I change the actual figures—to prevent identification—but retain their essential ratio: "Our department has \$5,000 this year for current expenses. Although second in rank in a department of five men my grant was only \$85.00. This sum was soon exhausted, and until next July my laboratories must get along as best they can without funds. In this matter the head of the department has absolute power from which there is no appeal."

The failure to include in book-lists those which the assistant professor requires for his advanced work and growth is also not unknown.

Facilities for the publication of longer, more ambitious work, rather than short papers, are inadequate. There are occasional instances where he has been urged by the superior, upon whose good will the permanence of his position and advancement depend, to undertake such a task and upon its completion face the necessity of paying a large sum toward its cost of publication out of his scanty resources.

5. Schedule and curriculum.

The burden of instructional work is too heavy to encourage, or even, in many cases, to permit, research work. The suggestion is made that there is too great a variety of undergraduate courses offered.

The men should have some share in the advanced courses and must be given entire control of the conduct of their own classes except for the natural limitations imposed by the need of correlation of courses. They should be free as to methods but held strictly accountable to the university for results.

6. Tenure.

The comments on tenure leave no doubt that a short term—like annual appointments—dominated by the head of the department is not wholesome and should not be tolerated. Probationary service, either in rank of instructor, or one term as assistant professor, is recognized as necessary and desirable; but a continued state of uncertainty is demoralizing. No institution—even for the gain of apparently frictionless administration—can afford to pay the price in injury to dignity and character disclosed by some of these letters.

7. Promotion.

The standards for promotion should be formulated, openly stated, and adhered to. It is urged that recognition be given to teaching ability, and that promotion depend not solely on research work when the burden of teaching makes this so generally impossible. "Promotion should not depend upon aggressiveness in cultivating friendships of those in authority, popularity with students or alumni, capacity for routine

administrative work, or the personal favor and persistence of the head of the department." Character, personality, ability, and reputation in the world of scholars should be the determining factors. Uniformity of standards in the different departments is highly desirable—the prevailing systems of indefinite tenure and recommendation by department heads tends to make as many different standards within a single university as there are heads. Each man's case should automatically come up for consideration at fixed intervals, and at these times he should be given an opportunity to present such evidence of fitness for promotion as he may feel he has to offer. The conclusions as to his position should then be clearly stated to him.

8. General faculty status.

The faculty should be the supreme academic body. "There should be more team-work and co-operation throughout." These men should have a voice and vote in determining the general educational policies. Fear need not be entertained that they will be too zealous or aggressive in the presence of older men whose judgments they have learned to respect. They wish to feel themselves a vital part of the institution and not mere employees. They wish to learn about these matters so that they too can give them intelligent consideration, get a view of their work in its broader aspects and relations, and receive some systematic training for the duties and responsibilities of higher positions. They have no desire to displace the older men—nor even to intimate that younger men have a great many new and invaluable ideas—but they do feel that a gain may come to an institution in preventing an attitude of settled convictions and consequent lack of further interest in its problems by injecting a constant stream of fresh blood. To counterbalance their lack of academic experience (after seventeen years as students and teachers) they offer an "idealism which has not been too rudely shaken."

9. Department status.

One of the tragedies of life is the way we are continually closing the doors behind us and forgetting the lessons which our experiences should have taught us. Nowhere, in this study, has this fact appeared more clearly than in the delicate matter of department organization. It is well, therefore, to listen to the voice of our composite assistant professor on this subject: "The assistant professor should have a voice and vote in all departmental matters as a matter of right and not merely as a concession of the head of the department." "I regard a democratic organization of the departments, with full discussion of concrete problems of instruction, as of the highest importance. Without it, proper co-operation of different instructors cannot be obtained. It indirectly contributes to an intelligent discussion of general educational problems in faculty meetings." "The president to be the head of each department and to see that the men in all departments have uniform treatment." "The organization at . . . , of departments with heads having large powers, is prejudicial to professors and assistant professors who are not department heads. A democratic organization of departments would be much more healthy—less immediately efficient but sounder in the long run."

In a democratic society the presence of a privileged class or of one, a considerable portion of which feels itself deprived of natural participation in affairs with which it is vitally concerned, is not wholesome. The solution of this vexed problem, already reached and long in satisfactory operation at one of our leading institutions, seems to be a democratic departmental organization, having a chairman, of strictly limited powers, on temporary appointment to the post.

10. Salary.

A general increase of salary in this rank is an imperative necessity; sufficient evidence of this has been presented. The cost of living has increased 50 per cent. in the period of teaching service of these men,¹ the requirements for promotion to the rank are much higher than they were twenty years ago, but there has been little change, on the whole, in the average rate of compensation. The gap between the salary of the assistant professor and that of full professor has, furthermore, greatly increased, thus adding to the difficulties of the former; for the compactness of the university community is well known. By taste, training, ability, aims, and aspirations, all belong to one social class, with practically similar demands and obligations.

¹ See *Bradstreet's*, November 13, 1909.

The institution, as well as the men, is loser by the present low standard, as a low mental tone is induced by worry; there is much loss of time in earning the necessary supplemental income, not to speak of the unfortunate dissipation of interest and energy; there is prevention of growth and development; save for single men the salaries are inadequate to provide books, necessary equipment, travel, attendance at meetings of learned societies and associations, or to permit the taking of a sabbatical year. In this latter regard, a sabbatical half-year on full pay is urged. The inadequacy of the salaries is driving many good men from the profession. "So much is this true that I am now seriously debating whether to resign now, and practice my profession, or to wait another year for a possible call to some other place." Or this, from a letter of one who had already resigned before the questionnaire reached him: "While I would rather teach than do anything else, and expect to continue in that work, it must be along clinical lines, and my living must come from my practice. In other words, teaching *per se*, particularly in the fundamental sciences, is a very much underpaid profession—certainly not sufficient for the support of two persons with the possibility of additions."

A definite and adequate salary scale is a bitter necessity. Parenthetically it may be stated that an average readjustment of 3 per cent. of the total annual budget would probably suffice to relieve the situation in this rank.

In summing up the aspirations of these men, I can do no better than to quote the words of the late President Canfield:

The three controlling desires of every normal man seem to be:

First, to live; not merely to exist. Almost anyone can exist in these days and especially in this country of ours. Mere existence is so easy and so common that a failure to secure this becomes noteworthy; the starvation of a single person in a population of nearly eighty millions becomes at once such an item of news that it is wired from one end of the country to the other and is commented upon by the daily press under special headlines. But the normal man desires something more than existence. He desires to live, in the sense that he wishes his fair share of those things which give color and meaning to his century. His home must be more than a mere shelter; it must be convenient and attractive and satisfying. His clothing must be such as to spare him the unfavorable comment of his fellows. Steam and electricity must minister to him, directly or indirectly. The current press must be at his reasonable command. Of libraries and art-galleries and museums he must have the privilege of use, and his necessary labor must not deprive him of the opportunity of enjoying that privilege. He must be able to make his house a home by adding a hearth—and there is no hearth for a man but the heart of a woman. In a word, he must be able to live as a breadwinner and husband and father and good citizen ought to live. This is not only his own right, but the rightful demand of the welfare of the entire community.

Second, to be a man among men. He is not to be content while he remains unrecognized and unknown. He is not simply a unit to be counted, but a man to be weighed and reckoned with. He wishes to stand shoulder to shoulder with his fellows, to look level in the eyes of other men with a sense of equality and power, to feel that his experience and his observation and his resulting opinions are of value to the world and the value is recognized, that men hesitate as to certain undertakings until they know where he stands. He will not admit that he is only a fraction of a man, but insists that he is at least one of the full integers which make up the sum of life. He is not to be a flint that never strikes fire. His nature desires and demands the esteem and the regard and even the affection of his fellows.

Third, to do that which will endure. He will have no part in oblivion, he is unwilling to be forgotten, he cannot abide the thought that his work is to perish, that all that to which he has given his time and strength and thought and power comes to an end simply because his body dies. He wishes to project his temper and his purpose and his plans into the future, to find in this way and even here the beginnings of

immortality, so to labor that at least a part of his finite product may be worthy to be woven in and in with the divine plan and thus become lasting and infinite.

II

The foregoing part represents the problem as seen from one point of view. It is therefore partial, incomplete. For the sake of completeness, a questionnaire (Appendix B) was prepared and sent to the presidents of the twenty-two institutions. The queries were drawn up for the purpose of showing, if possible, some of the broader movements which have affected and are affecting the status of the assistant professor, and also to get light from the administrative standpoint on the lower and upper limits of requirements for the position, etc.

An unfortunate clerical error, discovered too late for correction, called for data concerning students and staff for the years 1890-91 and 1900-1, instead of 1899-1900 and 1909-10. This was kindly remedied in some of the replies; while it was possible from other data available partially to remedy the error in a few other cases. It is greatly to be regretted that but ten practically complete replies had been received when the time for compilation arrived. It is obvious, for instance, that the present actual average salary of the assistant professor in these institutions could have been obtained (and used as a check on the result in Part I, as to whether the replies came from typical representatives of the rank), if answers had been received from each institution as to the number of assistant professors and the average salary. Because of partial answers, the showing of growth of student-body and staff must also be omitted. The general trends of these are too well known to need demonstration here. The following table (VII) has been compiled, however, from the data at hand, to show the change in the proportionate composition of staff which has taken place in the past twenty years. (See also *Science*, May 14, 1909, pp. 767-70.)

It is seen that while the assistant professors have formed a practically constant or slightly increasing proportion of the entire staff, the proportion of the staff above this rank has diminished to about one-half what it was twenty years ago, and the proportion of the lower ranks has correspondingly increased. The assistant professor of today, in other words, must win his way *out* of a larger group and *into* a much smaller group, relatively, than did the assistant professor of twenty years ago. This means that the competition is severer both for the position and for promotion out of it.

The replies to query 2c were unanimous that the present requirements for the position are more exacting than they were twenty years ago. These facts explain the high age of the men (36.8 average) shown in Part I.

When we compare our incomplete results with those shown in *Bulletin No. 2* of the Carnegie Foundation (pp. 29-32), we find our average reported salary of \$1,790 for twenty of the strongest institutions as compared to an average of \$1,600 for about one hundred institutions. It is there found that the age of entrance to a grade allotted an average salary of \$1,500-\$2,000 is 30 years; from our replies we find it to be 31.25. This checks remarkably well, the difference being such as we would expect to find, owing to the difference represented by the smaller and the larger group of institutions.

TABLE VII
PROPORTIONATE COMPOSITION OF STAFF

The returns for the age of entrance into full professorship, there stated to be 34 years, based on those *now holding* the rank, would show a considerable change, I feel sure, if we had the average of those *now being appointed* to that rank. This is obvious, since a large proportion of those making up the entrance age of 34 were appointed under the conditions prevailing fifteen to twenty years ago. The conclusions drawn on p. 32 of the *Bulletin*: "A man acceptable to these institutions for a position worth \$1,250 will be on the average 25 years old; a man appointed to a position worth \$1,750 will be on an average 31 years old when appointed to it; one appointed to a position worth \$2,500 or over will be on the average 34 years old," necessarily refer to what has been rather than to what is.

It would probably be nearer present-day facts in the average of these institutions to state that from 27 to 31 a man receives an average salary of \$1,100; from 31 to 41 an average of \$1,800; and from 41 on, \$2,500 or more. It would be interesting to get the actual facts in any institution as to this trend in change of age of promotion, by taking the average age of those promoted to full professorship in each year for the past twenty-five years; thus showing the tendency as affecting the most highly successful members of the profession.

Table VIII has been compiled partly from the replies, partly from data already in the hands of the writer, and partly from *Bulletin No. 2* of the Carnegie Foundation. Owing to its incomplete nature, we are not justified in drawing from it the general conclusions which it was hoped to obtain. It is, however, introduced on account of its value for purposes of comparison.

The replies to the queries in general are grouped alphabetically by institutions, and are, by permission, credited to their authors.

Queries 2a, b asked:

- a) Whether any basis of requirements for eligibility to promotion from instructorship to assistant professorship had been formulated, and
- b) What would be considered suitable qualifications.

The replies:

- a) "No."
- b) "It would be difficult to be precise. An instructor's term is three years. One or two such terms should indicate whether one is qualified for promotion" (President Judson).
- a) "No fixed requirements."
- b) "I should be unable to put them into the shape of any fixed formula" (President Lowell).
- a) "The Doctor's degree or the equivalent."
- b) "If, as is usually the custom, the assistant professor is to teach Freshmen, he should be a man whose character, disposition, and training make him fit for this important work. Many young doctors are notably unfit" (President Bryan).
- a) "The university has not definitely formulated a basis of requirements for eligibility for promotion from instructors to assistant professors."
- b) "Assistant professors should be from 30 to 35 years of age; have had training equivalent to that required for the degree of Doctor of Philosophy; should have demonstrated their ability as teachers to impart knowledge and inspire interest in their subject; should have had a minimum of perhaps five years of teaching experience" (President MacLean).

- a) "Nothing very definite."
- b) "Ordinarily the instructorship should serve as an apprenticeship for the candidate for a position in the required teaching force of the institution. The instructor should have such training and qualifications as to fit him for the minor work in his department, and to cause him to be seriously regarded as a prospective candidate for permanent position" (Dean Templin).
- a) "A man who fills well a position permanently needed."
- b) (1) "Character; (2) teaching ability with enthusiasm; (3) scholarship; (4) fitness for advancement as an original scholar; I should place age and experience lowest" (President Jordan).
- a) "No."
- b) "Age 23 to 30. Scholarship, A.B. and Ph.D. degrees with what they are supposed to indicate. Teaching ability, clear view of things, and power to impress and inspire. Experience, as much as possible at the age" (President Northrop).
- a) "The general understanding is that for promotion to rank of assistant professor, a man must give definite evidence of productive scholarship as well as teaching ability."
- b) "Cannot formulate answer" (President Hill).
- a) "No."
- b) "Do not feel able to formulate answer to this question offhand" (President Van Hise).
- a), b) "We promote a man from an instructorship to an assistant professorship if, after three years of teaching, he has shown exceptional fitness for teaching and research; or if, after five years of teaching he has shown such reasonable degree of success in instruction and administration as entitles him to promotion" (President Hadley).

TABLE VIII
SALARY OF ASSISTANT PROFESSOR
(Compiled from Various Sources)

| | Year | Minimum | Maximum | Average | | Year | Minimum | Maximum | Average |
|--------------------------|-------|---------|---------|----------|-----|-------|---------|----------------|---------|
| California..... | '89 | ..... | ..... | 1,800 | '07 | ..... | ..... | ..... | 1,620 |
| Chicago..... | ..... | ..... | ..... | ..... | '09 | 2,000 | 2,500 | 2,102 | |
| Clark..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 1,650 | |
| Columbia*..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 2,201 | |
| Cornell..... | '88 | ..... | ..... | 1,760 | '07 | ..... | ..... | 1,715 ('07) | |
| Harvard..... | '89 | 2,000 | 2,500 | ..... | '09 | 2,500 | 3,000 | 2,719 | |
| Illinois..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 1,851 | |
| Indiana..... | ..... | ..... | ..... | ..... | '09 | 1,000 | 1,300 | 1,083.33 | |
| Iowa..... | '89 | 1,200 | 1,800 | 1,400 | '09 | 1,100 | 1,800 | 1,418 | |
| Johns Hopkins..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 1,344 | |
| Kansas..... | '89 | ..... | ..... | 1,050† | '09 | 1,000 | 1,500 | 1,250 | |
| Leland Stanford Jr. | '91 | 2,000 | 2,500 | 2,250 | '08 | 1,500 | 2,500 | 1,827 | |
| Michigan..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 1,624 | |
| Minnesota..... | '89 | 800 | 1,350 | 1,162.50 | '09 | 1,400 | 2,400 | 1,791 | |
| Missouri..... | ..... | ..... | ..... | ..... | '09 | 1,500 | 2,000 | 1,800 | |
| Nebraska..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 1,500 | |
| Pennsylvania..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 1,850 | |
| Princeton..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 1,824 | |
| Virginia..... | ..... | ..... | ..... | ..... | '07 | ..... | ..... | 1,425 | |
| Wisconsin..... | '89 | 1,100 | 1,500 | 1,250 | '09 | 1,500 | 2,500 | 1,733 | |
| Yale..... | '89 | 1,750 | 2,500 | 1,900 | '09 | 1,800 | 2,500 | 2,100‡ | |

* "New regulations 1909, \$1,600 at appointment, \$100 annual increment four years."

† "An increase of 50 per cent. approximately in twenty years."

‡ "Two or three exceptional cases make an apparent range from \$1,500 to \$3,000."

Query 2c asked if these requirements are more exacting than they were twenty years ago. The replies were unanimous that they are so.

Query 3a, b asked the minimum, maximum, and average salaries paid in this rank now, and twenty years ago. The replies are included in Table VIII.

The question to be raised here is, ignoring all change in cost of living, whether there has been a change in salary commensurate with the higher requirements for the position. Of the nine institutions whose data are available, three (California, Cornell, Stanford) show an actual decrease in the average rate of salary for the assistant professorship; one (Iowa) shows practically no change; one (Yale) an increase of 10 per cent.; one (Kansas) an increase of 20 per cent.; one (Harvard) about 25 per cent.; one (Wisconsin) about 40 per cent., and one (Minnesota) 55 per cent.

The increase at Wisconsin has been uniform over the period, as can be seen from the following table:

| Year | 1889 | 1892 | 1901 | 1907 | 1909 |
|-------------|---------|---------|---------|---------|---------|
| Salary..... | \$1,250 | \$1,383 | \$1,500 | \$1,636 | \$1,733 |

At Harvard the increase came suddenly about three years ago, due to the Teachers' Endowment Fund; and at Minnesota suddenly about two years ago, largely due to the pressure brought to bear by the alumni upon the legislature and regents, in consequence of which a considerable general increase was made in the salary roll.

In looking at Table VIII, it should be borne in mind that some of these institutions have the associate professorship, intermediate between assistant and full professorship, while some do not.

Queries 3c asked, from the point of view of the value of their services to the institution, what would be considered a proper ratio between the average salaries of assistant and full professors. The replies:

"With us the assistant professor's salary is from \$2,000 to \$2,500, and the full professor's from \$3,000 to \$4,500. That indicates our view" (President Judson).

"A little less than double" (President Lowell).

"Assistant professors should have a higher salary. Full professors should have salaries sufficient to induce the best men to follow this occupation" (President Bryan).

"From the point of view of the value of their services to the institution as well as from the point of view of the demands upon them, the assistant professor's salary should be roughly two-thirds or three-fourths that of the full professor" (President MacLean).

"One to two" (Dean Templin).

"Average about half. But 'full' professors do not always 'grade up'" (President Jordan).

"Impossible to establish a fixed rate. If professors get \$3,500, assistant professors ought, after trial, to get \$2,500" (President Northrop).

"At present the salaries of [assistant professors range from \$1,500 to \$2,000, average \$1,800, and of]

full professors here range from \$2,200 to \$3,000. This seems as fair to the former as to the latter class" (President Hill).

"Question disregards fact that at Wisconsin we have associate professors" (President Van Hise).

"It must depend wholly upon the character of the institution" (President Hadley).

Queries 4a, b, c, were drawn up to elicit information regarding: (a) recognition of the existence of a class of permanent assistant professors; (b) if it existed, whether the present salaries were adequate for efficient life-service; and (c) calling for suggestions in regard to meeting the problem of a permanent class of assistant professors. The replies:

a) "Not formally. Practically an assistant professor who may not expect promotion would not be continued in the faculty."

b) "It is not considered by us expedient to have such a permanent class."

c) "I should not have such a class at all" (President Judson).

a), b) "We do not. After a certain length of service an assistant professor has hitherto been expected to win promotion or drop out."

c) "This is a difficult problem as yet unsolved" (President Lowell).

a) "Yes."

b) "No."

c) "Instead of making a permanent class of assistant professors I would make a special class of professors who devote themselves to the training of college boys—a task as important as that of those who devote themselves to research" (President Bryan).

a) "We do not at present."

b) "If conditions tend to form a permanent class of assistant professors the present salaries will not be adequate for efficient life-service in this work."

c) "I would give them votes in the faculty and after the first five years of satisfactory service, life tenure and make their salaries proportionate to full professors' salaries rather than to instructors' salaries" (President MacLean).

a) "Yes."

b) "No" (Dean Templin).

a) "Those most indispensable as men or as teachers or in research may look forward."

b) "No. Salaries should be higher and discriminations keener."

c) "I wish I could give any. It is one of the administrative problems most difficult to handle" (President Jordan).

a) "No. They are permanent if good enough. If vacancy occurs above them they may or may not be promoted. It depends upon whether a better man can be obtained."

b) "No. There should be a general lifting of the salaries of the whole grade."

c) "None" (President Northrop).

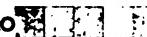
a) "No. All assistant professors are on permanent appointment and may look forward to promotion."

b) "I think not, but with chance for promotion before all, the salary seems reasonable for assistant professors in comparison [about two-thirds of full professors' salary]."

c) "I should prefer not to make a man 'assistant professor' till he demonstrates his fitness and capacity to become 'professor' when maturer. I would also treat all teachers of professorial rank as equal in freedom, initiative, etc., before the administration" (President Hill).

a) "Assistant professors for definite period of appointment, commonly three years; associate professors, indefinite."

b) "Salaries for assistant professors are too small, but not more so than for other classes of staff."

40  *The Association of American Universities*

[Ratio to full professors' salary (1907), associates 73.5 per cent., assistants 59 per cent., instructors 38.5 per cent.]

- c) "Would keep rank of assistant professor for definite period, and make that of associate professor permanent appointment" (President Van Hise).
- a) "We desire not to form a permanent class of assistant professors if we can help it. If a man is not ready to rise above \$2,500 with us, we make it easy for him to go to some other institution where research qualifications are less necessary for a full professorship. It occasionally happens that a man makes himself more useful to us as assistant professor than he could anywhere else and obtains a quasi-permanent position of this kind."
- b) "No."
- c) "I think it can be practically done away with if we recognize that nearly all men who make good assistant professors will make better independent teachers in schools where original deep thought is not so much required as it ought to be in university teaching" (President Hadley).

At Columbia it is recognized that there are certain men who might well remain assistant professors so long as they were in service, no matter what their compensation or the length of their experience. Persons whom it might prove to be desirable to retain in the service of the university, either as instructors or assistant professors, might, after having served for five years, be appointed by the trustees to serve during their pleasure, and their salaries fixed regardless of their grade. By making this provision for academic officers of this type, who are rather numerous, much of the pressure which is now felt to advance men to adjunct professorships and professorships, in order to reward them for long service or to give them increased compensation, would be relieved.

Queries 4d, f, g, h, i, and j had bearing on the relation of length of service to salary and promotion; 4d asked whether salaries were graded with respect to length of service. The replies:

- "Yes. \$2,000 for first four-year appointment; \$2,500 on reappointment" (President Judson).
- "Yes. \$2,500 for first five-year appointment; \$3,000 on reappointment" (President Lowell).
- "Yes" (President Bryan).
- "Length of service is one element to be taken into consideration" (President MacLean).
- "Yes" (Dean Templin).
- "Theoretically not so much as in fact" (President Jordan).
- "Yes" (President Northrop).
- "Yes, but not entirely, and we reckon the service elsewhere as well as here" (President Hill).
- "Yes" (President Van Hise).
- "First three years \$1,800; next five years \$2,500. A continued appointment after eight years' service is a rare exception" (President Hadley).

4f inquired whether length of service should constitute any claim to promotion. The replies:

- "Not by itself" (President Judson).
- "Yes, if the other qualifications exist" (President Lowell).
- "No" (President Bryan).
- "One claim for promotion, but only one, and must be considered with several other factors" (President MacLean).

"Not alone, but should be considered" (Dean Templin).

"Not much" (President Jordan).

"Yes, other things being equal" (President Northrop).

"Not apart from essential qualifications" (President Hill).

"Yes" (President Van Hise).

"Not after reaching the age where maximum service can be rendered" (President Hadley).

4g asked the length of service of the senior assistant professor in the institution. The replies:

"14 years" (President Judson).

"Not over 10 years" (President Lowell).

"8 years" (President Bryan).

"8 years" (President MacLean).

"10 years" (Dean Templin).

"8 years" (President Jordan).

"18 years" (President Northrop).

"8 years" (President Hill).

"16 years" (President Van Hise).

"8 years; one with nominal rank, 17 years" (President Hadley).

4h inquired the percentage of assistant professors promoted each year, on the average. The replies:

"20 or 21 per cent." (President Judson).

"Cornell promoted 19 assistant professors last year" (President Schurman).

"Assistant professors are promoted or dropped at the expiration of the second five-year term—with very rare exceptions" (President Lowell).

"Perhaps 1 or 2" [men?] (President Bryan).

"1, 2, or 3 promotions out of 8 to 16 or 17" (President MacLean).

"10 per cent." (Dean Templin).

"9 per cent. average past six years" (President Jordan).

"Can't tell. It depends on needs and money" (President Northrop).

"Unable to answer, as I have been president only one year" (President Hill).

"12 per cent., average for past seven years" (President Van Hise).

"Perhaps from 5 to 10 per cent." (President Hadley).

4i, j, asked (i) whether promotions are as rapid or as general as the highest efficiency of the institution demands, and (j) if not, what are the chief causes of delay. The replies:

i) "On the whole, yes. Rapid promotion is seldom desirable"; j) "We have sometimes been delayed by lack of funds" (President Judson).

i) "Yes, I think so" (President Lowell).

i) "No"; j) "Lack of money" (President Bryan).

i) "No"; j) "Financial reasons" (President MacLean).

i) "Yes" (Dean Templin).

i) "Yes, but salaries are too low" (President Jordan).

i) "Yes, in most cases"; j) "Lack of money" (President Northrop).

i) "Yes, I think so, as there are no barriers to the promotion of men who win the right"; j) "Financial

causes are most likely to operate against promotions here but I do not believe that difficulty is as serious as appears in some institutions. In most deserving cases adjustments can be made" (President Hill).

i, j) "Yes, so far as rank is concerned, but not as rapidly as desirable in the matter of money" (President Van Hise).

i, j) "If I understand the question, I think so. Of course, if we had more money we should make more promotions instead of allowing some of our good men to go away; but I do not think increased rapidity of promotion as important a question as increased salaries for full professors" (President Hadley).

Query 4e asked the essential qualifications for eligibility for promotion from assistant professorship to the rank above. In considering the replies it is to be borne in mind that some of these institutions have an associate professorship and some have not. The replies:

"Assured capacity as a scholar and teacher, and as a productive investigator. Of course, personal character is fundamental" (President Judson).

"I could not formulate this with definite precision" (President Lowell).

"An adequate measure of excellence of some sort, primarily in scholarship, but excellence in the training of college youths is also recognized as a valid ground for promotion" (President Bryan).

"Scholarship, proved by the results of a reasonable amount of research work together with some publications; teaching ability, proved by perhaps ten years of successful teaching; the test of success being applied a little more rigidly when promotion to a professorship is made than before promotion to an assistant professorship" (President MacLean).

"To be promoted, the assistant professor must have established himself as a permanently desirable member of the university faculty. His scholarship must be beyond question, as must also be his ability either as a teacher or an investigator" (Dean Templin).

"(1) Character; (2) ability as teacher; (3) ability to form independent judgments; (4) enthusiasm in work" (President Jordan).

"Thorough knowledge of the subject, and executive ability to manage the department, and enthusiasm for the work that will inspire assistants and pupils" (President Northrop).

"Greater maturity and more complete demonstration of ability in research, teaching, and general usefulness to the university" (President Hill).

"Before promoting from assistant to associate professor, must become convinced that instructional power and investigational capacity are sufficiently high so that institution desires services of man for life" (President Van Hise).

"The three qualifications for full professorship, in the order of average importance, are, original scholarship, organizing ability, and teaching power. Teaching power is placed third, not because of any underestimate of its importance, but because men who are good teachers at 30, but have not original scholarship or organizing ability, are apt to be (I do not say are always) less good teachers at 50" (President Hadley).

To determine the academic and administrative status of the assistant professors, questions 5a, b, c, and d were drawn up. They inquired (a) the participation of this rank in the legislating bodies, faculty, council, senate, etc.; (b) the voice in departmental matters; (c) whether on the same footing as full professors in respect to appointment to administrative and academic committees, which formulate, control, or direct educational policies; and (d) in respect to appointment as executive heads of departments. The replies:

a) The Senate consists of full professors; council of administrative officers only; assistant professors are members of all faculties. (b) Yes; (c) Yes; (d) No (President Judson).

a) Yes; (b) Yes; (c) Yes; (d) Nearly so (President Lowell).

a) They are made so by law; (b) In most cases, yes; (c) Yes; (d) We have no such cases (President Bryan).

a) Not members of university legislating bodies; (b) Presumably they have a voice in departmental matters, though it cannot be said that there is uniformity of practice in the different departments; (c) May be appointed, but such appointments are rare; (d) Occasionally made acting heads of departments; this is only on occasions when there is no one of rank of professor in the department (President MacLean).

a) Are members of the faculties of their schools, but not of the university council; (b) Yes; (c) Theoretically, yes; (d) No (Dean Templin).

a) Are members of faculty. New appointees are not admitted to council until the end of three years; (b) Yes, by regulations; (c) All members of council eligible to all committees; the advisory board, however, is elected by the council from the full professors only; (d) Have been sometimes acting heads, where there was no full professor (Stanford).

a) Faculty, yes; council, no; (b) Subject to the head of the department; (c) Yes; (d) If there is a head professor, he is head; if there is none, an assistant professor in the department may act as head (President Northrop).

a) Yes; (b) They are supposed to have, and our policy is to give them, equal voice with full professors; (c) Yes; (d) They have not been in the past, but I have positively committed my administration to an affirmative answer to this question for the future; I have had no new permanent heads of departments appointed, and shall not hesitate to appoint assistant professors (President Hill).

a) Yes; (b) Yes; (c) Yes; (d) Yes as to law, but not as a matter of practice (President Van Hise).

a) They are members of the faculty and have votes in all administrative matters; but they are not as a rule members of the higher bodies that deal with legislation in the narrower sense; (b) Yes; (c) Practically so, except as the greater experience of full professors creates a greater demand for their services on committees; (d) No; it is only in exceptional cases that an assistant professor becomes an executive head of a department (President Hadley).

Question 5e asked whether it was advisable for the younger men of an institution to take an active part in forming and executing its policies. The replies:

"Yes. For their own development, and to prevent the undue conservatism of age" (President Judson).

"Yes. Because he is more apt to be progressive" (President Lowell).

"Yes, assuming that the younger men are on the average equal in ability to the older, they have the advantages of their youth in terms of spontaneity and energy, and these should not be lost to the university" (President Bryan).

"I think it advisable. With the balance given by the older men of the faculty the university has the advantage of the strength and activity of the younger men, without the danger of their forcing wrong policies on the institution through lack of judgment. Their recognition is desirable as a part of the administrative machinery, and this does not exist if the younger men are not taken into the administrative counsels" (President MacLean).

"Yes, to promote progress" (Dean Templin).

"Yes, in order to realize their difficulties. But they should not be too zealous before studying problems" (President Jordan).

"Yes. Because the institution may profit by the best thought of all—and the younger men sometimes know more than the older" (President Northrop).

"I do. Because they can often render valuable services, and because they thus become more serviceable, more loyal to the institution, and find greater satisfaction in their work" (President Hill).

"Yes. Advantageous to have them consider themselves as part of the institution in the full sense" (President Van Hise).

"Yes. I regard it as self-evident" (President Hadley).

Query 5*f* asked whether it was desirable to have departments conducted on a democratic or autocratic basis. The replies:

"A qualified democracy is the better" (President Judson).

"Democratic" (President Lowell).

"Autocracy means, as a rule, more immediate efficiency. Democracy of the right sort means lasting health in the organization, with all the good consequences which flow therefrom" (President Bryan).

"It is desirable that departments be conducted on a democratic basis" (President MacLean).

"Neither. Republican rather" (Dean Templin).

"Democratic in so far as experience and circumstances permit" (President Jordan).

"Democratic with a *head*" (President Northrop).

"Democratic" (President Hill).

"Democratic" (President Van Hise).

"It depends wholly upon the men you have on the staff. If the president is wise and the rest of the teaching force foolish, it is desirable that it should be autocratic. If the president is foolish and the rest of the teaching force are wise, it is desirable that it should be democratic" (President Hadley).

To the request for suggestions concerning the problem of the assistant professorship, looking toward higher individual or institutional efficiency, there was much more reticence on the part of the presidents than on the part of the assistant professors. Two replies only were received. Fortunately, they sum up the conclusions most adequately:

"The principle ought to be established that 'there is always room at the top.' Under an autocratic system or even where permanent appointments are made of 'heads of departments,' there is never room at the top. A more democratic organization of department faculties seems to me to be one of the most important and pressing reforms demanded in educational institutions" (President Hill).

"Better pay: greater insistence on superior life—which involves zeal, character, interest in students, interest in knowledge, and ability to distinguish scholarship from pedantry" (President Jordan).

The writer's task is completed. For the opportunity offered him to prepare this paper, and to all those who burdened themselves with so thoroughly answering his many questions, he wishes to express his grateful thanks. He has made no attempt to trace the historical development of the assistant professorship in the American university system, nor to disentangle the combinations of regular and acting, adjuncts, assistants, associates, and juniors where these exist,¹ nor to show the possibilities of university teaching as a career. He has merely tried to present a faithful cross-section of the existing conditions of the assistant professorship in the institutions represented in this Association.

Both sides have been heard; their conclusions are in striking accord. The initiative for improved administrative status and adequate salaries lies in the hands of the one; that for increased zeal, worth, and efficiency in the hands of the other. The outlook is full of opportunity and promise.

¹ One institution has twenty regular titles in its list of staff.

APPENDIX "A"

QUERIES FOR ASSISTANT PROFESSORS

(Suggestions and comments on points not covered below will be gratefully received.)

1. Age?
2. Degrees?
3. Years spent in collegiate and graduate (or professional) study?
4. To what extent did you hold fellowships or receive similar assistance?
5. To what extent did you go into debt for your training?
6. How long did it take to pay this debt?
7. Length of teaching service below rank of assistant professor?
8. Length of teaching service in rank of assistant professor?
9. Married or single?
10. Number of children?
11. Present salary?
12. Average salary during entire teaching service?
13. Total savings from salary (exclusive of insurance)?
14. To what extent have you supplemented your salary by income from other sources?
15. Is your income sufficient to make both ends meet or are you running behind?
16. If willing, will you state your present net deficit or indebtedness?
17. How much insurance do you carry?
18. What are your opinions concerning the status of the assistant professorship (*a*) in sharing in the determination of general policies of your institution; (*b*) in departmental policy, curriculum, and assignment of courses; (*c*) in conduct (i. e., direction) of individual classes?
19. What are the conditions of nature and amount of work, etc., and do these reasonably favor carrying on advanced work and intellectual growth?
20. What are the conditions governing the tenure of the assistant professorship, and are they the best for reasonable independence of thought and action?
21. Have you any suggestions to make concerning the problem of the assistant professorship, looking toward higher individual or institutional efficiency?

APPENDIX "B"

QUERIES FOR PRESIDENTS

(Suggestions and comments on points not covered below will be gratefully received.)

1. Kindly fill in this table:

| | 1889-1890 | 1899-1900 | 1909-1910 |
|-------------------------------------|-----------|-----------|-----------|
| Number of full professors..... | | | |
| Number of associate professors..... | | | |
| Number of assistant professors..... | | | |
| Number of instructors..... | | | |
| Number of assistants..... | | | |
| Number of students..... | | | |

- 2a. Have you formulated any basis of requirements for eligibility to promotion from instructorship to assistant professorship? (*b*) What would you consider suitable qualifications of age,

training, scholarship, teaching ability, experience, etc.? (c) Do you consider the present requirements for the position of assistant professor to be more or less exacting than they were twenty years ago?

3a. What are the minimum, maximum, and average salaries paid assistant professors of your staff this year? (b) What were these salaries in 1889-90? (c) From the point of view of the value of their services to the institution, what would you consider a proper ratio between the average salaries of assistant professors and of full professors?

4a. Do you recognize two general classes of assistant professors, temporary and permanent; that is, those who may reasonably look forward to promotion and those who, for one reason or another, may not? (b) If conditions tend to form a permanent class of assistant professors, are present ruling salaries adequate for efficient life-service in this rank? (c) What suggestions would you make in regard to meeting the problem of a permanent class of assistant professors? (d) Do you grade assistant professors' salaries at all with respect to length of service? (e) What do you consider essential qualifications for eligibility to promotion from assistant professorship to the rank above? (f) From the point of view of the administration, should length of service constitute any claim for promotion? (g) How long has your senior assistant professor served in this rank? (h) On the average, what percentage of assistant professors are promoted by you each year? (i) Are promotions as rapid or as general as the highest efficiency of the institution demands? (j) If not, what do you consider the chief causes of delay?

5a. Are your assistant professors members of the legislating bodies, faculty, council, senate, etc.? (b) Have they a voice in departmental matters? (c) Are they on the same footing as full professors in respect to appointments to administrative and academic committees which formulate, control, or direct educational policies? (d) In respect to appointment as executive heads of departments? (e) Do you consider it to be advisable for the younger men of an institution to take an active part in forming and executing its policies? Why? (f) As a matter of the highest efficiency of the institution, do you consider it desirable to have departments conducted on a democratic or autocratic basis?

6. Have you any suggestions to make concerning the problem of the assistant professorship, looking toward higher individual or institutional efficiency?

7. Are you willing to have your name attached to quotations from these answers?

DISCUSSION OF THE PROBLEM OF THE ASSISTANT PROFESSOR

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. VAN HISE: This subject of the increase of salary which we have all found necessary and which we have all found so troublesome, is going to continue. It has been the hope of some of us that some time prices would cease to rise; that this increase of 50 per cent. in the cost of living would represent the end; that finally we would have a retrocession, and, therefore, that this problem would not be so pressing; but, on the contrary, the same tendencies that have continued during the past twelve years are to continue in the indefinite future. And these data which have been presented show that in the matter of adequate salaries we are just as far behind as we were twelve years ago, even in those cases where there has been an increase of 40 to 50 per cent.; and in those cases where the increases have been less than 40 to 50 per cent., we are farther behind than we were twelve years ago. The Director of the Mint up to the end of the year 1907 reported that in the

treasures of the world in coin there were about \$7,000,000,000 in gold, roughly. During the twelve years—ending with the year 1907—the product of the gold from the mines had been something like \$3,650,000,000, and the golden flood is coming on with an increase of \$20,000,000 a year. It passed the \$400,000,000 mark in 1906, and for 1909 the output is more than \$460,000,000. In other words, during the past fourteen years other products have not risen in value on the average, although that has happened in many cases, but our standard of value has fallen, and will continue to fall. I see no prospect that it will cease to continue to fall for the next ten years; and so this problem is not simply a problem of the assistant professor, but it is a problem of adequate salaries for the entire instructional force; it is a problem of adequate funds for the institution along all lines.

SECOND SESSION UNIVERSITY EXTENSION

PAPER PRESENTED ON BEHALF OF THE UNIVERSITY OF WISCONSIN BY
PROFESSOR LOUIS E. REBER

In comparing the causes which contributed to the inception of the university extension movement with the forces which led to the establishment some centuries before of the ancient universities of England and the continent of Europe, Dr. Roberts, eminent English educator, enumerates three new factors as instrumental in the origin of both: "the introduction of new subjects of study; the adoption of new methods of teaching, and the growing tendency to organization which accompanied the development and consolidation of nationalities." That the parallel is a just one as applying to conditions which have led to the extension movement in America is so evident as to arouse no contention.

Modern advances in science as applied to the arts and industries; the continuous stream of discoveries and inventions; the responsibility of the individual in a democratic country, not alone for his own well-being, but also for that of the community, the state, the nation in which he lives, are a few of the factors which constitute our growing demand for new subjects of study. The same factors contribute to the need for new methods in education—methods by which every man, woman, or child, under whatsoever conditions of existence, may be brought within the radius of educational influences. The third feature of the parallel fits conditions nowhere better than with us where organization is the watchword of the people.

We have, then, a great national call for some method of popular education adapted to the needs of all classes—moneyed or poor, young or old, with or without education, laborer or person of leisure. We are accustomed, I believe, to look upon the present wave of effort to democratize education by carrying it to the people in their homes and places of employment as a new discovery for which much credit shall redound upon our time, and if not upon our own country at least upon that of our ancestors and cousins across the sea. The fallacy of this view of our activities is repeatedly impressed upon the observant in records of educational progress in the past, wherein it is reiterated again and still again that

the favored few whose good fortune enables them to frequent a university or other seat of learning shall regard their attainments as a trust held by them in the interest of the many. From the time of the Greeks, who lectured to the people on the street corners, to the day of the *Lyceum*, remembered by most of us as an effective influence in popular education in the United States, the ferment has been present, leavening the loaf, with varying success, but steadily tending toward and contributing to the present development.

UNIVERSITY EXTENSION IN ENGLAND

As an introduction to a review of the origin and growth of university extension in England, it is not irrelevant to recall that in mediaeval times the foundation statutes of the old universities, almost without exception, required that the persons accepted as students should include "the poor," "the indigent," "men living on alms," in most cases the applicant being required to make affidavit to a condition of poverty. But in contrast to this requirement there is provision in several of the statutes for special privileges of the university to be enjoyed by "founder's kin" and the presence of a richer class of student is further implied by remonstrances addressed to those who desire "to live more delicately than suits the poorer portion of the community and make the modus of their expenditure notably to exceed that which their founder by rule appointed." Such a reproof was administered to the Fellows of Merton as early perhaps as 1284. The records show a very small allowance for food and clothing and a stringent effort to enforce upon all students, in the interest of the very poor, the rule of plain living. "The important difference," however, in the words of a recent publication, "between mediaeval and modern Oxford is not that in the Middle Ages the majority of the students were drawn from the poorer while today they are drawn from the wealthier classes, but that in the Middle Ages *the university was open to practically all who desired to learn, irrespective of wealth or poverty.*"

Many conditions have contributed in the course of the centuries to the gradual lessening of the availability to the poorer classes of university privileges. This restriction has advanced so far that even the modern system of scholarships, originally intended to afford opportunities to worthy poor boys only, has been applied since the middle of the nineteenth century to the ablest candidates, irrespective of financial condition. There is some degree of justice therefore in the claim made by the working classes of England that some method of popular education by which they might share in the great endowments of the universities should be devised as a restoration of lost rights, rather than as a new privilege.

In 1845 an address was submitted to the Hebdomedal Board of Oxford petitioning for the adoption of measures for the admission of a poorer class to the university. "The ideal of a national university," said one petitioner, "is that it should be coextensive with the nation." "The university," said another, "should strike its roots firmly into the subsoil of society and draw from it new elements of life."

In 1850, the Oxford Commission drew up seven schemes for university extension, but these all applied to the bringing about of enlarged opportunities at the university. A long

stride in advance was made in the same year when Mr. Sewell, fellow and senior tutor of Exeter College, struck the keynote which promoters of extension teaching have been sounding ever since, with the inquiry, "Though it may be impossible to bring the masses requiring education to the university, may it not be possible to carry the university to them?" Mr. Sewell published a pamphlet elaborating a plan by which university benefits should be carried to non-university cities under conditions of co-operation of university and town similar to those which afterward prevailed in England, and also, with modifications, in this country. The Oxford Commission, however, was not then prepared for so great an innovation, and made the argument not unfamiliar in our ears today, that the universities need all their resources for improvements within their walls.

In 1855 Lord Arthur Hervey, in response to a demand for connected courses of lectures for the mechanics institutes, then rapidly increasing in numbers and importance, published a twenty-page argument favorable to turning to the universities for the guidance and help they desired. He recommended courses of six lectures to be given by "professors who might be called rural or circuit professors, to be nominated by the university." A difficulty lay in the way of the immediate adoption of these recommendations in the still inadequate railway service. Interest was aroused, however, and this awakening to the value of wide educational advantages led to the introduction of systems of local examinations first for adult and then for young students.

Mr. Sadler, secretary to the Oxford Delegacy for University Extension, says, "The establishment of University Local Examinations at Oxford in 1857 and at Cambridge in 1858 produced administrative machinery which was subsequently used for the purpose of arranging courses of lectures in different centers under the supervision of one or the other of the universities."

From this period may be dated the consistent development of a system of university extension clearly expressed as "the taking of a definite part by the university in the education of persons who had not been matriculated." The records of its early growth are of the most intense interest. I cannot better portray the circumstances which led to the rapid adoption of one feature after another of university extension than by hastily reviewing some incidents in the work of Professor Stuart, lecturer in Cambridge University. In 1867 an association of women teachers, afterward known as the North of England Council for the Education of Women, invited him to give them a course on the art of teaching. Mr. Stuart did not consider himself sufficiently experienced to lecture upon this subject, but offered to "describe the art of teaching by showing a piece of it." His proposal was accepted, and he prepared a course of eight lectures on astronomy. This was the beginning in England of popular lectures *in series*. Other societies of women teachers in adjoining communities applied for the same opportunity with success, and the "educational circuit" was introduced. Professor Stuart made use also of a device which has been of universal service in all university extension work, namely, the printed syllabus. He also exacted of his auditors an examination. Meeting with some difficulty in the introduction of this inno-

vation, on the ground that it was "unladylike for women to go into an examination, especially when conducted by a man," a compromise was effected by reading the questions in the class, but permitting the ladies to answer them in writing in the privacy of their homes. (A notable result of the introduction of this feature of extension work was the institution of higher examinations for women.)

Before Professor Stuart had completed this course to women, a call came to him to deliver a lecture to working men in the Mechanics Institute at Crewe. It was believed that these men could not endure more than one lecture from the same person, so Mr. Stuart consented, though it was contrary to his principles to deliver a single lecture. His subject was "Meteors." It is reported that on the night before the evening set for the lecture there occurred "by singular good fortune one of the most brilliant meteoric showers on record. Neither the lecturer nor the local manager had counted upon such an advertisement from heaven. When Professor Stuart entered the lecture hall, he found it packed with excited and eager people. He was confronted by fifteen hundred expectant faces." The lecture was a decided success, and Mr. Stuart offered to return and give a course of lectures upon astronomy to the same people. The proposal was received with tumultuous applause, and the true principles of university extension which so long had lived only in theory were thus put in practice for the working men of Crewe.

Lectures in series, a circuit for the lecturer, examinations, and syllabi, all important features of university extension work, had their origin, as has been seen, with Professor Stuart. Another important feature of the work in its further development originated at this time through an interesting accidental occurrence. Professor Stuart's lectures to mechanics were delivered in a large common hall. One day, on account of haste, he left a number of illustrative diagrams hanging upon the walls. "When I came back the next week," Professor Stuart records, "the hallkeeper said to me, 'It was one of the best things you ever did, sir, leaving these diagrams. Our people were all here last night and a number staid and discussed your diagrams and explained them to each other for an hour or more, and they have some questions to ask you before the lecture.'" Such was the origin of the class.

I have spoken so fully of these incidents in the experience of the pioneer in university extension lecturing, because similar conditions, similar needs, and similar examples of humanity to those which confronted Professor Stuart forty years ago meet the extension worker today, and it is interesting to know that the people's demand shaped the work in its earliest stages upon lines so nearly identical with those upon which it was destined to crystallize.

Another note continually sounded during this formative period, which also is of universal application, is expressed by an early English educator. "It is an important fact," he says, "that the extension lecturer needs to be of a different type from the resident lecturer at the university. He must begin by arousing interest in his hearers. His way of presenting his subject must be very clear and simple. He must have some of the traits of a public

speaker. He needs to have a turn for organization. Not the least important thing is that he should enter his work with a desire for the improvement of social conditions and a belief that university extension may be made a valuable factor in bringing about the good change"—all characteristics vitally essential in extension work today. We hear not infrequently the story of the college lecturer who when asked to deliver an extension course refused the invitation on the ground that he had not thought out his subject clearly enough to present it to *the people*.

After delivering courses of lectures at Leeds, Liverpool, Manchester, and Sheffield, Mr. Stuart appealed in 1871 to the University of Cambridge to adopt the scheme of university extension as he had put it into practice, and organize lecture as well as examination centers. In 1873 a syndicate, which had been appointed to investigate the matter, reported favorably. The lead of Cambridge was followed by the founding of the London University Extension Society in 1876 and by the adoption of the work by Oxford in 1878. The establishment of these three great branches in England was followed by the introduction of the system in all English universities.

I may be pardoned, I trust, for quoting freely, from the *Report upon Oxford and Working-Class Education*, such paragraphs as will briefly convey an idea of the measure of success the movement met with in England and also in what respects it failed to accomplish for the working classes the educational reforms which they demand.

The work of University Extension has been successful in stimulating an interest in higher education among a large number of persons, especially women, who are unable to study in universities. It has elicited hidden talent, and has given encouragement and guidance to many isolated students, a few of whom have been encouraged by the teaching given to prepare themselves for entering one or other of the universities. It has spread knowledge of the subjects of university education, and has done something to counteract the tendency to narrow views of adult training. Above all by arousing local interest in intellectual matters it has helped to lead to the establishment of universities or colleges, as at Sheffield and Nottingham in connection with Cambridge, whilst colleges at Exeter and Colchester have been the direct creation of Cambridge University Extension and that at Reading of Oxford University Extension.

The report on the other hand enumerates three main reasons why the system did not until within the past year or two supply the education desired by work people.

The cost of the lectures was borne by the members of the class or by local subscription. In order to cover expenses, "without dependence upon a patronage distasteful to all concerned," the classes must be so large as to make anything like tutorial instruction impossible. And further, in order to secure so large an attendance as is required to pay the cost, the lectures must be popular rather than educative, and succeeding courses must

continually attack new subjects instead of offering the opportunity to master thoroughly an old one. This [says the report] is not due to ignorance as to the importance of regular study on systematic lines, but solely to the fact that better judgment must yield before irresistible financial considerations.

[The second defect is found mainly in] the fact that individual students rarely receive the personal guidance and supervision which is offered to an undergraduate in Oxford, and which is all the more necessary

among work people, because in an industrial city the means of knowledge—libraries, book shops, and the atmosphere of culture—are less easy of access than they are in a University town.

[The third defect is seen in the fact that] hitherto, with some important exceptions, the lecturers employed have not necessarily had close connection with the teaching work at Oxford itself. [The principle is here enunciated that] both lecturers and students should feel that they share in the dignity which comes from belonging to an ancient academic body and that their endeavors should win the same sympathy from Oxford which is given to work done within its walls. . . . "Teaching beyond the limits of the University" has hitherto implied a second-best which is offered to those who cannot proceed to the University.

The report from which the foregoing quotations have been made is the result of the deliberations of a committee consisting of "seven persons nominated by the Vice-Chancellor of the University of Oxford and seven persons nominated by the executive of the Workers' Educational Association." This report went to print in May, 1908. A note prefacing its main substance announces that the university has already taken steps toward fulfilling its recommendations, with the result that tutorial classes have been established in a number of towns and that in economic subjects tutorial class work is accepted as preparatory to, or accredited in, diploma courses.

Thus in England the closer affiliation with the university desired by the working classes in their further education has been accomplished, and university extension has become an organic part of the national system of education, in fact as well as in name.

UNITED STATES

The circumstances under which university extension was introduced in this country and the early history of the movement are so familiar that time should be devoted to little more than a brief survey of the main facts.

The great popular educational factors in the United States previous to 1890 were the American National Lyceum founded in 1831 and Chautauqua, with its summer schools and Literary and Scientific Circle, started in 1874. Both of these societies, though quite independent of direct university affiliation, embraced many features that belong to university extension.

University influences were widely diffused through the Lyceum lecture courses, which included among their contributors such men as Daniel Webster, Emerson, Horace Mann, Wendell Phillips, and others of wide renown.

The true principle of educational extension underlay the establishment of the Lowell Institute of Boston and the Peabody Institute of Baltimore, both representatives of the early Lyceum. The debating-club, earnestly fostered by university extension today, began with the Lyceum, and the traveling library, so essential an adjunct to extension teaching, was first proposed in this country in 1831 when a portion of money was set aside by the Lyceum for what was termed "itinerating libraries."

Mr. Herbert B. Adams, in the *Report of the United States Bureau of Education* for 1900, ascribes the establishment and spread of those summer assemblies, which were the forerun-

ners of the summer schools of Harvard, Virginia, Wisconsin, and many other state universities, to the influence of the old Lyceum and says further, "It is no secret that the summer schools of Oxford and Cambridge were suggested by American experience."

Correspondence-study, a method of popular education which has in the past decade become an increasingly important feature of university extension teaching, was used in Chautauqua teaching as early as 1878. It is interesting to note in passing that this method under the title "Printed Lectures" was used in England in 1887, nine years later than its introduction by Chautauqua. These lectures were sent to remote and isolated students and were accompanied by lists of searching and suggestive questions similar to those which form an important feature of the more modern correspondence-study.

Chautauqua, like the Lyceum, has been useful in spreading university influences. Its summer schools are conducted chiefly by college professors, who for many years continued the instruction throughout the year by correspondence. At one time it was possible for the Chautauqua student to aspire by this means even to a college degree, the power of its granting being vested in the University of the State of New York. This privilege was withdrawn, however, when other means for home study became more generally available.

The English system of university extension was first fully presented to an American audience by Professor Herbert B. Adams of Johns Hopkins University, who delivered an address upon this subject at a regular meeting of the American Library Association in September, 1887. Mr. Adams' address awakened prompt and fruitful interest among those who were gathered at this conference, and an immediate result was the introduction of some extension work under the auspices of public libraries in Buffalo, Chicago, and St. Louis.

Four months later, in January, 1888, Mr. Melvil Dewey, then librarian of Columbia University, addressed the regents of the University of the State of New York, and in July of the same year and again one year later, university convocations, advocating the introduction of university extension teaching in connection with the public library work of New York. In 1890 a committee of New York colleges and universities urged the regents of the University of the State of New York to introduce university extension as a part of the state university system of education.

In the same year, 1890, Philadelphia organized the American Society for the Extension of University Teaching and sent Mr. George Henderson, its first secretary, to England to study methods. This society was and is quite independent of university patronage, being supported by private contributions. Upon Mr. Henderson's return from England one center was organized and in the course of the following six months no less than twenty-three were under way.

The spring of 1891 brought the first state appropriation for the organization of university extension. This was in the state of New York and the sum appropriated was \$10,000 to be used for organization, printing, and supervision. Mr. Dewey's report to the regents of the university remarks:

The university extension law met with opposition from the legislature till the clause was added providing that in working out a system in which one great essential was lectures, no money should be paid to lecturers. Thus the opponents were willing to have the play of Hamlet if the Prince of Denmark could be excluded by state law. Fortunately [continues Mr. Dewey] there was no prejudice against public libraries, and we took the line of least resistance and spent our time and money in building up libraries and developing our splendid system of traveling libraries and collections. The language of the appropriation allowed us to develop study clubs, to do some general administrative work and print syllabi for occasional extension courses throughout the state, but we had no *funds for the two most essential elements, competent organizers, and experienced lecturers.*

This quotation has been given at length to show how little, in fact, that first appropriation meant in the establishment of actual university extension teaching. This work was entered in the Bulletins of the university under the caption of "Home Education" and included extension teaching, study clubs, exchanges, traveling libraries, public libraries, and the library school.

Early in 1891 a society for the extension of university teaching was organized in Chicago with Professor Zueblin as its secretary, but in 1892, extension having become an organic part of the educational system of the University of Chicago, the original society was disbanded.

In December of the year which had seen so much activity in the state of New York, in Chicago, and in Philadelphia, a national congress in the interest of university extension was called at Philadelphia. It is recorded in the annals of this meeting that in the four years intervening between Mr. Adams' address in 1887 and this date, December, 1891, twenty-eight states and territories had organized university extension work. The enthusiasm of those who attended the conference was unbounded. The new cause, too young to have been fully tried, too sanguine to admit its limitations, seemed to be all silver lining. Mr. Moulton's vision of "university education for the whole nation, organized upon itinerant lines," had seized the imagination with a completeness that precluded recognition of unfavorable possibilities. Mr. Dewey, though so earnest an advocate of the movement, alone we are told sounded a note of caution, predicting the cooling that would follow upon the sudden blaze of this new flame, before the strong heat of a steady fire could be secured. In the following four or five years the truth of Mr. Dewey's prevision was amply substantiated, the work having been practically abandoned by a large number of universities whose adoption of it had been over-hasty.

The more firmly established branches of university extension remained and steadily enlarged their usefulness, and in the following years new societies were founded to an extent worthy of note. But the wave of enthusiasm had passed, and the country was ready to look the matter squarely in the face, determine the adaptability of this transplanted system to American conditions, and solve the problem in accordance with its application to American needs.

In the *Atlantic Monthly* of March, 1892, an article was published by Professor George Herbert Palmer, entitled "Doubts about University Extension." This article has been

quoted repeatedly in publications relating to university extension. Mr. Palmer's argument is to the effect that university extension in England "accompanies a general democratic upheaval of an aristocratic nation; it springs up in the neighborhood of universities where the common people do not resort; in its country other facilities for enabling man to capture knowledge are not yet general." He calls attention to the fact that England is a compact and thickly settled country, easy of access in every part, lending itself more readily than our vast areas to extension methods. Thus Mr. Palmer points to fundamental differences between the two countries, and questions whether the English system of university extension can be made to thrive in our more democratic soil.

Grave doubts are expressed as to the permanent response which our people will make to the education offered, and attention is called to the difficulty of securing a sufficient number of suitable itinerant lecturers and teachers, as an insurmountable barrier. This article further cautions against the serious danger of superficiality, of cheapening, and a tendency to educational insincerity as a result of the new methods.

During the years succeeding the earliest experiments in university extension in this country, Mr. Palmer was not alone in his questioning. Many conservative views were set forth. The aristocracy of scholarship made its scornful comment in agreement with Miss Repplier's pithy summing-up of the method as offering "the second-rate at second-hand." Nor was the number small of those who echoed the voice of the Cambridge commissioners who saw need for all their resources within the walls of the university.

Publications during a period covering from ten to fifteen years expressed the general belief that university extension in the United States was practically dead. Even its most loyal friends saw that it was not accomplishing all that they had hoped. "It failed because it did not meet a popular demand," wrote one; "It has not created so large a body of serious students as was expected"; "University extension has fallen into channels of popular appeal," came from others.

It had become evident that though university extension teaching as borrowed from England was successful in several populous areas, yet, in order to become coextensive with the nation, it must adopt new methods to fit new conditions.

The recognition of this fact heralded a new era for university extension and for some years past the work has been making its own response to doubters.

The fundamental differences between England and America pointed out by Mr. Palmer doubtless exist, yet those experiences of England which have led to recent modifications of method in order to bring about a closer affiliation between university and working classes would seem to imply that "the people" there are not dissimilar to "the people" here.

There has been some reason, no doubt, for the fear that extension teaching will be more or less superficial, but I believe that there is now general acceptance of the principle enunciated by Mr. Moulton, that "as dealing with people who work for the most part under difficulties," the method must be "*more rigorously thorough and not less,*" than that of other

agencies. It is recognized, also, that in comparing non-resident with resident students it is common experience to find in the former a strength of purpose and earnestness, greatly to their advantage.

SCOPE AND STANDING OF UNIVERSITY EXTENSION AT THE PRESENT TIME

The problem of finding a staff of extension workers possessing the very special qualifications required of them is still a serious one. President Hadley, with reference to university extension at Yale, says:

We made some experiments of that kind fifteen years ago, and repeated them in a little different form five or six years ago; but we felt in both cases that with conditions as they existed in this part of the country, the men who were capable of conducting such courses could obtain larger results by directing their energies into other channels.

Mr. Hadley's observation has more or less of truth at the present time, but in the five or six years that have elapsed since Yale's latest experiment, university extension has undergone radical changes. The work has ceased to depend solely upon a staff of lecturers who must combine the qualities of teacher, organizer, public speaker, scholar, and philanthropist. We no longer subscribe to the epigrammatic proposition of Mr. Lyman W. Powell (one-time extension secretary at the University of Wisconsin) who said of university extension, "It is not a system; it is a *man*." Significant as is the element of truth in this terse characterization, the time has passed when it expresses the whole truth or even a large proportion of the truth. If today we desired to express educational extension in a single word, that word would be *University*.

One of the most widely known and gifted extension lecturers in our country wrote a year or two ago of this phase of educational development:

Like all ideas and movements, it has fulfilled itself in unseen ways. It is no longer an occasional and accidental phase of university work; it is an organic part of it. It is no longer concerned merely or primarily with short lecture courses; for without neglecting the lecture work that appeals to general audiences, it aims to reach, like any other part of the university, a student body—the very large body of partial or non-resident students.

The words of this passage are taken from a recent report of the department of extension teaching in Columbia University. The work offered by this institution to the "partial or non-resident student body" referred to embraces courses of collegiate grade; professional and technical courses for teachers; evening technical and evening commercial courses; and short lecture courses. The instruction is carried on in late afternoons, evenings, and Saturdays at the University buildings, at Teachers College, Morningside Heights, and at other places where local centers may be established. These courses are intended to give to men and women who can spend only a portion of their time in study an opportunity to gain a liberal general education or one applicable to their vocations, and to make progress if they so desire toward an academic degree, or a teacher's diploma.

Courses of university grade may be taken for credit or not as desired. If for credit,

the applicant must fulfil all conditions for entrance to the university. If credit is not desired, no further qualification is required than the ability to satisfy the instructor that the course can be taken to advantage.

Of those students who were engaged in extramural courses last year, 1,206 took credit work and 11,719 non-credit work. Those who took credit work in extension courses in the university buildings numbered 2,032. Of these 224 matriculated. Credit work was carried on at seven centers in and about New York City and included twenty courses with a total of 615 lectures. Non-credit work was carried on in fifteen centers.

What more striking example can be shown of the present tendency to utilize the machinery of a great institution for a much larger student body than that qualified, by educational attainments and other conditions, to matriculate?

In preparation for a report of the status of university extension at the present time, inquiries were sent to 75 universities, colleges, and other agencies for extension teaching. Responses were received from 65 institutions and of these, 54 reported participation in extension work of some form.

It is to be regretted that the limits of this paper do not admit of detailed descriptions of the growth and present magnitude of agricultural university extension. It would be necessary, in order to give even a hasty review of its institutes, demonstrations, short courses, traveling schools, and general activities, to present a chronicle of equal or greater length than this. Such a paper should be of compelling interest. The pioneers who first broke away from tradition went among the children of the soil bearing a message of improved conditions of work, of richer harvests, and of happier lives. Mr. Hamilton of the Agricultural Department in Washington is preparing a bulletin on the present status of this work which will be published, I believe, in the course of a few weeks.

Description must be omitted, also, of a very large number of extension agencies, such as the People's University Extension Society of New York, with its splendid philanthropies, and the free lecture courses offered in our leading cities, among which those of the New York Department of Education, so ably conducted by Dr. Leipziger, are pre-eminent.

Responses to inquiries show two important facts: first, a growing tendency on the part of institutions of higher learning toward extension of their usefulness to persons who are not candidates for a degree or who do not have the educational qualifications to matriculate in the university, and second, that in newer developments of extension teaching the formal lecture method has yielded, in large measure, to other educational forms. Among these, correspondence-study has become increasingly prominent, especially for students remote from cities or large towns. Also, as a means of additional education for teachers and other seasonal workers, a rapid expansion and increase in the number of summer schools has taken place. And in the larger cities, late afternoon, evening, and Saturday classes at local centers have become a valuable extension agency for vocational or general training.

The experience of the University of Chicago with respect to the original form of university extension teaching, namely, by means of lecture courses accompanied by classes,

written papers, and examinations, has been somewhat exceptional. Its work extends over nearly half the continent, covering 28 states, thus demonstrating that large distances do not necessarily present insurmountable difficulties. In 1907-8 the total attendance at lectures reached 53,141 persons, the average attendance per lecture was 282, and the average class attendance, 150. In 1908-9 a drop was experienced in the lecture audience to 31,094, but this was directly traceable to the loss of four popular lecturers, Professors Zueblin, Sparks, Howerth, and Willett, whose places were not filled. Chicago has been successful, also, in correspondence-study teaching, her record for this year showing an aggregate of 2,500 active students.

Mention has been made of classes offered in other than work hours by Columbia University. Brown University also gives night lectures, for credit or not as those who take the work desire. Tulane, Chicago, Pittsburgh, Northwestern, and Cincinnati universities are doing similar work. In every case, I believe the only condition imposed upon those students who do not desire credit is that they shall satisfy the instructor that they can take the work to advantage. Harvard offers this year in Boston three evening courses for credit in Freshman and Sophomore studies through the Lowell Institute. Two universities recently organized, Toledo and Newark, are providing in their foundation for extension teaching at other than workers' hours. Toledo, indeed, like Exeter, Colchester, and Reading in England, is the direct outgrowth of a university extension center.

Of 32 *state* universities and colleges reported, 23 are offering general extension work. Of these, 15 have thoroughly organized, comprehensive extension departments under the permanent direction of a dean, director, or extension committee (Universities of California, Colorado, Florida, Georgia, Indiana, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, Nevada, Oklahoma, Oregon, Tennessee, Texas, Utah, Washington, Wisconsin, Wyoming, Pennsylvania State College, and Rhode Island State College).

With reference to credit work offered by means of extension courses, returns show at least 22 universities in this classification (Brown, Chicago, Cincinnati, Colorado, Columbia, Florida, Harvard, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Northwestern, Oregon, Pittsburgh, Texas, Toledo, Tulane, Washington—at St. Louis—Wisconsin, and Wyoming). Of these, 11 use correspondence-study in their extension teaching (Chicago, Florida, Indiana, Kansas, Minnesota, Nebraska, Oregon, Texas, Washington, Wisconsin, and Wyoming).

It is noticeable that a number of state institutions are making use of extension methods chiefly as an aid to the teachers of the state. This limited field probably results from three causes: first, the evident need of some agency to assist the busy teacher to keep in touch with educational advances; second, the fact that this is the path of least resistance, extension work among teachers offering no difficult problems, and, third, on account of the organic relations between the teacher and the state university, which are evidently becoming more closely knit, in spite of the high-school protest against university domination.

The sums devoted by state institutions to extension teaching during the past years have

varied greatly. In a number of these institutions the work is either of recent origin or newly reorganized. Not a few of the responses from heads of state universities record the intention to ask for specific appropriations at the next legislative session.

Except in a few cases extension work has not been self-supporting and, unless conducted under the most favorable conditions as to location, it cannot be made self-supporting. Nor does there seem to be a logical reason why this form of education should be less freely acknowledged as a public charge than the old established institutions of our educational system. Its immense possibilities for economic and cultural usefulness to the whole people, its need for state support to insure a permanent existence, and the fact that the equipment of established institutions should be made available for its use, all point to the wisdom of making university extension an organic part of the state system of education.

Conclusions drawn from the data collected point to a notable broadening and liberalizing of the academic spirit. The fact that there are those among the old conservative universities now offering extension teaching with no more stringent specification than that the applicant shall be able to show that he can take the work to advantage, is evidence of a remarkable change in their educational atmosphere.

In the state universities a similar spirit is manifested, but in a greater variety of ways. The state university recognizes a responsibility to a more definite constituency—the people of the state who support it. That this constituency shall be served by the university in every way in which the university is the best instrument to render the service, is a part of the new educational creed. This conception of the responsibility of state institutions has led to an especially wide-reaching organization for extension teaching in certain states, notably Wisconsin, Nebraska, Texas, Minnesota, and some others.

It has been seen that the principles underlying university extension are as old as the oldest educational institutions and that many features of the work in its present development are merely adaptations of forms introduced in the past. A superficial view of these facts may provoke some degree of discouragement in the believer in university extension as a permanent partial solution of the American problem of further education for the masses. It is my desire to point out wherein modifications in the present forms would seem to promise remedies for the defects of earlier experiments and why, therefore, we may believe that in America as in England, new applications of tried methods will succeed where old ones were ineffective.

UNIVERSITY EXTENSION IN WISCONSIN

Paraphrasing the English commissioner of 1845 we say today that the ideal of a state university is that it shall be coextensive with the state. This ideal is rapidly becoming in Wisconsin a realized fact through the agency of university extension administered by the university.

Organization of the entire state into districts from each of whose central offices the several functions of extension shall emanate; co-ordination and control of district activities

through the administrative agency of a comprehensive main center, and intimate organic correlation of the work with the state university, are the essential features of the plan which must be realized before the university can be said to be truly coextensive with the state.

Although Wisconsin has made important advances in accordance with this scheme of state organization, the fulfilment of the plan has nowhere been completely realized. In no instance thus far has a state appropriation been large enough to support the local centers required to cover the field. Yet the practical impossibility is recognized of carrying on the vast number of activities now included in university extension, effectively and thoroughly, without division of the state into districts, in which branch extension workers under the constant supervision of the central office at the university may be established. Such a plan of district administration, admitting of close relations between instructor and student, is an essential feature of the vocational work among industrial employees which holds so important and significant a rank in recent developments of university extension.

Nor can effective results be secured in other departments of the work without some means of local contact. Night-class teaching; special classes for correspondence students; organization of clubs for debating and discussion of useful current topics; introduction of lecture courses of special or general application; promotion of relations between educational agencies, such as the public schools, and business corporations, in the interest of young employees; guidance of young people who are failing to develop their best possibilities; assistance in the spread of library facilities and the rapid passing of special books or apparatus from student to student; co-operation with municipalities or rural communities in civic improvements: these are some of the activities for which university extension requires district organization.

The central offices at the university must house a dean or director, secretaries of department work, a staff of lecture and lesson writers, and the clerical force. Among the instructors will be found experts in the several departments of engineering, specialists in commerce, economics, and municipal government; trained and experienced teachers covering the entire range of academic study; other teachers and lecturers whose pedagogical equipment fits them for work with school teachers and elementary classes.

Every district center must provide district headquarters, classrooms, laboratories, and library facilities. Its administrative force will consist of a superintendent, field organizers, and local teachers.

University extension in Wisconsin works under four main departments: Correspondence-Study; Instruction by Lectures; Debating and Public Discussion; General Information and Welfare.

The Correspondence-Study Department, though scarcely past its third year, shows a registration of over 3,500. Of these about 800 are working for university credit. Nearly 2,000 are engaged in special studies with vocational bearings. The remainder are entered for general or preparatory courses.

The student working for units of university credit is usually mature, persevering, and

capable, requiring little supervision beyond that supplied from the central office, seldom needing a spur to lagging ambition. He enters the work with a purpose which is always before him—the ambition to acquire a university education—and as a rule he achieves the desired end.

The student taking vocational work, on the other hand, though frequently mature in years, is immature in mental processes. He generally has no fixed habits of study, is unaccustomed to confinement out of working hours, has an imperfect conception of the benefits to be derived from a course of study applied to his vocational employment, may be burdened by home cares, and, as a rule, affords with difficulty the fee for instruction, however small. He often must be taught his need, inspired to begin a course of study and encouraged to continue it, helped over hard places, and shown in his shop or in the local laboratory the direct application of his lesson to the industry in which he is employed. He should experience the benefit of occasionally meeting in the classroom other students with whom he may compare notes and whose experiences may be helpful to him.

For this class of correspondence student, the industrial employee, nothing less effective than district organization will avail. The plan in its final fulfilment embraces classes of correspondence students under local direction in manufacturing districts studying shop mathematics, machine construction, and other subjects fundamental to mechanical processes; in mining districts engaged in courses of study designed to improve their proficiency in mining engineering; in commercial centers taking business courses—in fact, university extension, effectively administered, offers vocational training directly applicable to prevalent industrial conditions in every part of the state.

Wisconsin's organization at present includes but two districts and covers about one-fifth of the state—one district with headquarters at Milwaukee, the second, at Oshkosh.

In the Milwaukee district in less than two years over 1,000 students have been enrolled for vocational study. The courses taken include shop mathematics, mechanical drawing, steam engines, electricity, business management, accounting, commercial law, and other subjects of like practical bearing. It is not unusual for the employer to co-operate with the university by supplying a suitably furnished classroom and permitting classes to be held during working hours, an evidence of interest which should bear fruit in improved relations between employer and employee. Frequently rooms in schools and libraries are used for purposes of instruction, or accommodation is supplied by the university. It should not be, and usually is not, difficult to secure the co-operation of school and library boards.

In the Oshkosh district, also, where the work is of recent inauguration, a keen interest has been manifested by employers of labor. In one instance the public-spirited owner of large business interests has carried co-operation so far as to offer to pay the fees of all employees who complete courses of study. This gentleman has supplied well-furnished classrooms and has equipped them with books recommended for the students' use. The experiment is one which commands general interest with the assurance that it cannot fail to be productive of good results.

The Department of Instruction by Lectures depends at present upon recruits from all departments of the university and, although limited by insufficient funds, is of use in spreading educational influences in the cities and towns of the state. It is confidently believed that, with an adequate appropriation for its further development and the assistance of an effective field organization, it can be made a powerful instrument of betterment.

The Department of Debating and Public Discussion is securing good results in Wisconsin. Bulletins proposing topics for debate and giving references for both sides of the question are published by this department and sent without cost upon application. Books and shorter treatments of the subjects proposed are collected and sent to communities remote from libraries or unable to secure data by other means. In the past year through this instrumentality assistance has been given in the study of useful current topics to 128 high schools and academies; to 32 women's and men's clubs, and to a number of other organizations. There have been distributed 18,000 bulletins; 5,880 classified articles have been lent. Thousands of people have been helped to learn the facts relating to such subjects as the "Immigration Problem," "Good Roads," the "Commission Form of City Government," etc., and to think about and talk intelligently upon them. It is impossible to estimate the value of widespread training of this character, especially for the rising generation, to whom many of the problems now under discussion will come for final solution.

The Department of General Information and Welfare has recently added a member to its force whose work will serve to illustrate its field of usefulness. This work has to do with municipal government. Its purpose is to assist cities in securing favorable legislation in matters relating to forms of government; street lighting; food supply; public sanitation; playgrounds; the prevention of abuses, such as unnecessary noises, excessive smoke, unsightly sign posting, and the many other conditions affecting the health, comfort, and happiness of the people. In order to give intelligent co-operation the department is ready to supply information respecting laws in operation in other cities, both at home and abroad, and their results. Its representative visits cities throughout the state, lectures upon general or special conditions, and is conducting correspondence courses on several phases of the subject.

A quite different form of extension teaching under the direction of this department is the conduct of conferences or institutes of special interest to a limited class of persons. Under this head may be included a successful institute for the associated bakers of the state, held at their request, and, more recently in conjunction with a committee of citizens, a conference on criminology, which brought together a number of the well-known lawyers, clergymen, and philanthropists of Wisconsin.

This department has been an active agent in the state in the campaign against tuberculosis, and contemplates similar measures against other diseases. It aims to serve also as a clearing-house for all national and state publications of value to the people of Wisconsin.

The enumeration, though too brief to cover the activities of university extension, must not be prolonged. Difficulties and discouragements have been met in establishing the

work as described. New difficulties and discouragements will doubtless arise in its further progress. But the measure of success already achieved has been sufficient to justify a belief in its future. Three forces must be subsidized for its permanent foundation: adequate financial support; close affiliation with the resident work of the university; and the sympathetic interest and co-operation of the other public educational agencies of the state.

DISCUSSION OF UNIVERSITY EXTENSION

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. CARPENTER: I should like to ask the writer of the paper to what extent correspondence work is credited toward the requirements for a degree, and what degrees are involved.

MR. REBER: The student in correspondence work may take half of his work in correspondence. The work is not credited, however, toward the degree, until he has done an equivalent amount in residence at the university.

MR. CARPENTER: He takes half in residence, then, and may take half in correspondence?

MR. REBER: But he does not receive credit on the books of the university for his correspondence work, until after he has done his residence work. With regard to what degrees may be taken, I might say every department can determine what it is willing to offer for credit. So any degree may be involved.

MR. CARPENTER: It is not possible, then, as I understand it, to obtain a degree by work done entirely *in absentia*.

MR. REBER: Half of the time must be spent here. Half of the work, however, may actually be done away. (In reply to a question:) Any work may be taken if the work is offered for credit. In the first place, the department determines whether it is willing to have certain work offered for credit. It may be Senior work, it may be Freshman work, it may be Sophomore. If that work is offered for credit and the student does the work satisfactorily, he gets the credit, under the conditions mentioned before. The department may require the student to come here for examination. Frequently this is done, or the examination is conducted, by someone designated by the department, at the student's home. We have, too, graduate work taken by correspondence, but there is no definite regulation with reference to advanced degrees.

MR. CARPENTER: That is, a candidate for an advanced degree may do part of his work by correspondence?

MR. REBER: There is no definite regulation on that question.

MR. CARPENTER: What is the practice?

MR. REBER: There is no fixed time in which a certain quantity of work shall be performed. If he has done some work in correspondence, the probabilities are that it will shorten the residence work. I believe the director of the Graduate School is present. I think that is right, isn't it?

MR. COMSTOCK: That is right. Speaking broadly, the statement may be made that correspondence work has no bearing upon the acquisition of the advanced degree. There is possibly

an exception to that. We have what is known as candidacy for the Master's degree partly *in absentia*, whereby a person may attend three summer sessions of the university, devoting his work in those summer sessions to a specific line of work, and supplementing his work in those sessions by work done *in absentia* under the direction of the department in which such work lies.

MR. CARPENTER: To what extent?

MR. COMSTOCK: To such extent as the department prescribes. The two things work in together there. This is not properly correspondence work, as it is not carried on through correspondence. The man has certain work outlined for him. He is supposed to do that work *in absentia*, and must show that he has facilities for so doing it. As I indicated at the outset, it is not properly correspondence work, and the general statement is that we do not make provision for the obtaining of higher degrees through correspondence work.

MR. REBER (in reply to a question): If a man is "failed," he may not make up the work by correspondence. If he is simply conditioned—there is a difference between those terms here—he may make it up by correspondence. That is, if he is on the ground, he cannot take refuge in the extension department but must repeat the subject regularly.

MR. COMSTOCK: A candidate for the advanced degree who takes his work in the summer session must spend at least three summer sessions in residence. I suspect that, treating it by and large, it might be called half-work, and yet I would be loath to say any principle of that kind is established by the University.

[MR. CARPENTER: May I ask President Judson what their practice in Chicago is with regard to crediting correspondence work toward the degree?

MR. JUDSON: Correspondence work, in the first place, in order to have any credit at all, must be supplemented by examination at the university on the course. In the second place, one-half of the work toward the Bachelor's degree will be accepted by correspondence—not more. As to the advanced degrees, no correspondence work is accepted toward them. Perhaps an apparent qualification might be made, although it isn't a real qualification. If the student, although he has a Bachelor's degree, has not done the work toward that degree required for the higher degree, he may do the work for that, though it is a small amount. But no graduate work is done. With regard to the Doctor's degree, technically one-third of that might be done in two years by correspondence. Practically, that has not happened, and probably will not happen. Small portions of that work might be done by correspondence.

MR. CARPENTER: After the satisfaction of a fixed period of residence?

MR. JUDSON: Yes, sir, precisely. Originally only one-third of the work for a Bachelor's degree was credited by correspondence. But after a number of years' experience we are so satisfied with the work administered by our correspondence department that we made it one-half. Moreover, the students who have done the work and claimed credit number about half a dozen in the last few years.

MR. VAN HISE: I may perhaps supplement Mr. Reber's statement in reference to university extension, by considering the matter, not broadly, but with reference to our local conditions. The first question which naturally arises concerning university extension is why a university should

undertake any such work. Why should not this work be done by the school? For instance, why should not the vocational work, which is being done by the university extension department here, be done by trade schools in the state? The answer to that question is, that it should be done by trade schools, or that there should be trade schools to do that work, and that the university should not find it necessary to do it. And that is practically the key to the answer why the university should undertake any of these lines of work. If there were adequate educational facilities in the state, it would not be necessary for the university to undertake extension work. But the present educational system in this state, and in every other state, is defective in many particulars. It fails to accomplish the work that it should accomplish. It is perfectly clear that if in the future trade schools develop in this country, as I believe they will, as they have developed in Germany, to do the work of a trade school, that it will not be necessary for a university to undertake extension work along these lines. But that time is far in the future.

The same situation is true in reference to many other fields. The marvelous expansion of knowledge in the last half-century has put a new situation before us. Up to the middle of the nineteenth century the knowledge that the people could use had been fairly assimilated by them. The progress of the past sixty years has been greater than that of the two thousand years before and the result has been that knowledge has accumulated far beyond the assimilation of the people; indeed, it has accumulated since the adults have left the school. We can let them die and develop the schools, and so solve the question in the future, but that would be of no avail to the many millions now of adult age who would be glad to have an opportunity to supplement the neglected education of their youth.

We perhaps first learned this lesson in the state with reference to agriculture. We found it was not adequate for the Agricultural Station at Washington to have knowledge which could be applied to practical ends in the state. It was not even sufficient for our own station to have such knowledge. It was not sufficient to publish bulletins and put that knowledge into the bulletins and send it out to the people of the state. It simply fell flat, and was not utilized. We found in agriculture that in order to get the results we had to go out to the people, carry knowledge out to them, actually to become canvassers of knowledge, following business methods in carrying out knowledge to people along these practical lines. Someone said, "Is it dignified for educational authorities to go about the state?" I answered that question by saying that the brewers of Milwaukee did not wait for Hazel Green to say that they needed a brewery, but they bought a corner, put up a brewery, and increased their business. It seemed to us that in educational matters we should be at least equally aggressive. So in agriculture we started in to carry out this work by way of demonstration, by simply going to the farmers with the knowledge which was important for them to have in order to have high success.

This idea was carried over to other fields with reference to vocational studies in the cities, and, as you have appreciated from Director Reber's statement, this work of the division of which he is head has been more largely brought to the cities, to do for the artisans in the cities what has been done in agriculture for the farmers in the rural districts.

Both of these necessities, perhaps, in the future will disappear. Possibly the trade schools of agriculture and the trade schools in vocational work will handle these lines of work. I hope they may get so they will handle them. But until they do, there is this opportunity before us. But would that mean, when the time comes when the vocational schools will handle this work,

that the function of the university extension division will cease? We are not looking to Mr. Perry's boys in the trade schools in Milwaukee while they are in the trade school, but when they graduate we expect to get hold of them along other fields than their vocation, to make broader, better citizens of them by studies in politics, history, language, and literature, and all those fields which they have not had opportunity to enter. And therefore there would be the same necessity for the extension division, only the emphasis would shift. The work would not put so much stress upon the vocational side.

In the work as it has been described in this state you will note that we have stressed very little the original form of extension, the Lyceum system. There is large opportunity for that work, but as yet we have not done very much in it, because we have not regarded it as most important. Information may be imparted by a systematic set of lectures. But that is not half so important as getting the man to do something for himself. And so as we have developed the work here in this state, our idea has been to make it educational, getting the fellow to work, instead of pouring information upon him. So our stress has been on correspondence work, debating work, and other lines of work which put the student to doing things for himself. The commercial correspondence schools discovered a great educational opportunity which the universities were slow to realize.

In the correspondence work there are, however, especially for the vocational fields, two very serious difficulties which we soon appreciated: that the student had to work by himself, without contact with his fellows; he had to work without a teacher. This required a greater amount of stamina in him. We saw those difficulties, and Mr. Reber's idea was to establish a traveling professor. In order to do that we had to get the co-operation of the merchants and manufacturers in Milwaukee. Some of them have furnished a classroom. So the students have been brought together in classes and the instructor meets the students. That places correspondence work on an entirely new basis, makes another thing of it from what it is when it is simply correspondence work without the contact between teacher and student and when every student works by himself.

The rural debating society was a center eager to work. But it did not know how. What kind of questions did it discuss? "Is George Washington or Abraham Lincoln a greater man?" "Is men's intellect greater than women's?" Questions that began nowhere and ended nowhere. But the interest was there. So we put a man to work on that problem. Syllabi were prepared upon the live political and social questions, with references to the original sources upon which they are based; and the rural debating society was furnished with those syllabi and those works. Thus rural debating becomes, with the eagerness of youth, a strong educational force. If we are going to have the initiative and referendum in this country it will be better to have our youth learning to think soundly upon the questions upon which they are going to act.

The new method of handling extension is to get the boy or girl at work; in short, to be educational rather than informational. The fundamental purpose of extension is to enable every boy or girl to develop as far as his or her capacities will go. This will require that the work done in the schools be supplemented. The university is the best center for this work and therefore on the theory that we should undertake any line of educational work for which we are the best fitted instrument, the University of Wisconsin has organized its extension division.

MR. LAUGHLIN: The question which was just asked separates the subject very naturally from that which was discussed a moment or two before. The relation of a state university to its constituency, as in Wisconsin, is very close, and obviously the state would look to such an institution

for assistance and ideals in this secondary work. There could be no question about the desire of the institution to assist in that kind of thing; and the state would have a right to expect that leadership.

That, however, is a very different thing from its general application to the relation of universities to the community as a whole. When we think of the collegiate work, of the possibility of giving to persons away from educational institutions courses that could be put upon a basis with the work done in the universities, then we have an entirely different problem. The statements that have been made bring out the very splendid idealism that lies behind the Wisconsin plan, an idealism that is beyond all question. Nevertheless, the question of practical experience must inevitably come up, and there is an obverse to the shield in that respect. It has been mentioned that it is possible to influence the community in the way of establishing sound methods of thinking on great public questions. Now, how far is it possible, by any of the instrumentalities that such extension work possesses, to accomplish anything of real importance in that direction? The two instrumentalities that have been used are, first, the lecture system, following the Lyceum idea, and, second, the correspondence work.

In regard to the lecturing, I fancy that the influence would be infinitely less than that of the ordinary newspaper; that it is an attempt to educate at the end of a twenty-foot pole; that you have the audience very little under your control, and only for a few hours. They then pass away into their old environment. Those things are obvious, and in experience, the tendency would be to reduce the work of the so-called lecture system. Moreover, there would be the inevitable difficulty in getting the proper kind of a man. The tendency would be to put the emphasis on the man who was glib of speech and popular in presentation, and then by an insensible gradation the man who was superficial in his thinking. He must adapt himself to the lowest member of his audience rather than to the best. The tendency, therefore, is rather to create the type of man sometimes called the "extension man," who is very far from representing the scholarly ideals of the university. Time and again the tendency would be to send out a man of that type, who misrepresents the scholarly intent and purpose of the university; and it is a question in experience whether such a person has not done more damage to the reputation of a university through the community than can be repaired in a generation. Obviously, the community would expect that the university would send out a man who would best represent the university to the community. On the contrary, that is not the type of man that could be sent out. As a matter of fact, the best type of university men are those who are heavily occupied within the walls of the university and cannot go out and do that sort of thing. In brief, there is great danger in the possible tendency to reduce the appreciation of the kind of thing that the university would hope to do for the community, through the class of men that would be chosen to do extension work.

If the men were called upon to travel and go away some distance, you would find that you had not only a fiscal question, but a question of nervous force. No man can do his best work inside the university and also do this outside traveling and popularizing work. It inevitably means that you have got to select a type of men and leave the best men in the university; while on the other hand, you have no right to send out men whom you would not trust to carry out the work in the university. The practical difficulties in getting men to do it I think in course of time will be demonstrated to be almost prohibitive.

Then with regard to the correspondence work, which has been the much more possible and practical plan in actual effect, it has no great advantages in carrying on serious university work.

President Van Hise has pointed out that there may be ways by which you can put an instructor in charge of certain men. That may be true with regard to the work of the secondary school. But when it comes to the work of serious college instruction, the student is removed from libraries, removed from materials; and the kind of thing that is done never can be done in the same fashion as in the university. The obvious result, then, is that the sort of work done in extension is gradually, insensibly, but intelligibly differentiated from the kind of work done in the university. Then comes the difficulty, when you ask for credits in the university, of trying to adjust the extension kind of thing to the kind of thing done in the university. There is the inevitable difficulty of granting credits; and certain superficial passing marks will undoubtedly be given; but how is it possible to educate—in the real sense that education gives power to grasp and power to think and therefore the power to work out the problems of life—under a process that leaves the isolated students in a position where they do not connect themselves with the really vital personality of those who are superior in knowledge and training? I only want to suggest, as an obverse to the shield, that in actual practice, splendid as the ideals may be, there is going to be very great difficulty.

We have had little experience with actual results in correspondence work. The opportunities have never been followed up seriously by any number of persons. There are only chance cases. One thing or another comes in. They drop off. It isn't continuous.

MR. VAN HISE: That is not our experience. Some of our professors have said to me that some of the very best work they are getting is by correspondence. When the work was taken up here, there was a great reluctance on the part of some of the professors, and to meet that reluctance, when the extension division was finally reorganized, there was an understanding that no department should take it up unless it wished to. Some have taken it up and their reports are that they are able to get, with carefully prepared recitation papers and the answers sent in, thoroughly satisfactory work by correspondence.

MR. LAUGHLIN: That would probably be true of elementary work or introductory work. Also it would be truer of some subjects than others; that is, some subjects lend themselves to this kind of work and others do not. I should suppose that this field in Wisconsin, because of your splendid equipment in agriculture, would be exactly the field in which it would be most successful, because there one has the material, one has the laboratories, and it is a kind of instruction which is sure to go to the right spot.

MR. LOWELL: I should like to ask President Van Hise one question about the use of the word "correspondence." Evidently this is not carried on extensively by letter, but by all sorts of other means. How far do those other means come in, how far is the instruction that you give—and I leave out of consideration the secretary's school of instruction at Milwaukee, and the agricultural work, and take in the work which is done here in the university and which is done more or less by your own instructors outside—how nearly is this work carried on by the same method with which you carry on your own classes here in the university?

MR. VAN HISE: The work that is done for credit in the university is a class of work which is not supervised by the traveling professors, because it is scattered. There are 3,500 students in correspondence work. Of those there are only about 800 who are doing the work for credit in the institution, men and women who have met the entrance requirements of the university and who are often working with the expectation of getting degrees. A man doing correspondence work for a

degree is usually a man who is engaged in teaching, either in a secondary school or college, and that kind of person often comes up to the summer session, so that the summer session and the correspondence work supplement each other for this group of students.

MR. LOWELL: Then, as I understand it, this work is practically the instructor directing his reading, and occasionally, not with great regularity, but occasionally, meeting him for conference and going over what he has done.

MR. VAN HISE: Not only directing his reading, but having very carefully prepared papers with reference to that reading. The examination may be in the charge of someone designated by the extension department elsewhere, for instance the principal of a secondary school; or, as was indicated, the man may come up to the university, taking it at the time when the examinations are given. Now, those are the persons who, the instructors say, are quite as good as the university students. While there was hesitation on the part of the faculty to undertake it, now that the work is established and the lesson papers prepared—a large amount of labor—I have not had a word of complaint by a single department as to the result. The temper of the faculty has completely changed in those departments that have done extension work. There may be departments that I don't know about who would not make these statements in quite as unqualified form as I make them, but it has so happened that those who have come to me in reference to the matter have expressed their satisfaction and surprise at the results they have obtained, and there have been no departments saying they were dissatisfied.

MR. REBER (in reply to questions): The subjects taken more generally than others are German and mathematics. There are a large number of students in the latter subject. The students who take credit work are largely teachers. A number of them are graduates of normal schools, who could, by residence work at the university, secure a degree in two years. By using the summer sessions for half the work required and taking the remainder by correspondence, they may secure degrees eventually without disturbing their earning power. I should say three-fourths of the credit students are teachers. The others are high-school graduates who hope to come to the university sooner or later to continue their studies. They are young people.

There are a number of graduate students who take such subjects as biology. Several physicians are taking this course. Although there are graduate students in Milwaukee, the larger number there, as stated before, are vocational students—not taking work for credit.

In Milwaukee we have a permanent force of resident organizers and teachers. The man in charge is called district representative. All the local or district work is under his general direction. Beside the classrooms in the shops, spoken of before, there are other classrooms in the same building with the district offices. Every night in the week this building is open for regular classes and for work with individual students who are not in classes.

Every credit student who has come up for examination has passed. This is not surprising, for the reason that every lesson turned in is criticized with great care and every student is the subject of personal supervision and interest. It is seldom, moreover, that any but earnest and capable students enter correspondence courses for credit. So far as I know there has not been a student who has come to the university after preparatory correspondence-study who has not passed his residence work and passed it creditably. A considerable number of students have done this. In several departments in the beginning there was a feeling of skepticism as to possible results from

correspondence work. Those departments now admit that results attained by students who have taken residence work after correspondence-study have removed their doubts.

For credit students we use texts very largely, supplemented, however, with explanatory notes and full instructions. Questions to be answered are sent with each assignment. The same general matter is sent each student, but the teacher makes an effort to treat each case individually. His detailed instructions, therefore, may differ with different students. To avoid any effect of "machine process" he corresponds individually with the student. In other words, the instruction is varied to meet the individual needs of the student as far as possible. Instructors are requested to correspond freely with students, a practice which makes the labor connected with correspondence work enormous. We are gradually securing a group of instructors who give their entire time to it. Their standing in the university is the same as that of other teachers.

MR. CAPPs: The questions last asked of Mr. Reber lead directly to the weakness of the system of correspondence. For some ten years as departmental examiner I had to supervise the results of the correspondence work in the Greek department, and I felt constantly, more and more, the futility of any system that we could work out for securing the two different things that the system seemed to demand: first, to carry on in an intelligent way the work of students who were very eager to advance in knowledge in certain lines—that was a perfectly legitimate and simple thing to do; and, second, to do that work in such a manner that the results could be compared with university work and credit be properly given. And those two things seem to me quite incompatible in any working system that I have had contact with.

In the first place, as soon as the first enthusiasm is over you get a class of men to do your teaching who are not the university instructors, or who, if they are the regular university instructors, are instructors upon small pay, who must eke out their income by the fees. These persons in course of time will soon be giving the examinations, not the university, assuming that the system is on a self-supporting basis, the only kind I have had experience with. This is the fatal defect of that system. You have a separate faculty, a faculty that is a shifting faculty, youngsters who come and go each year, do the work as they choose, supervised by somebody who gets very tired of supervising; and very soon the work is, or may be, a different thing from what you set out with.

MR. VAN HISE: We expect \$80,000 this year for university extension.

MR. CAPPs: That is a very different thing. On the other hand, you do feel that the faculty isn't supervising this sort of instruction as they do the intramural instruction.

MR. VAN HISE: When a department has a small amount of work to do, we start the work with the help of the force in the department. But as soon as the work grows so that there is enough to devote the time of one man to it, we get a man to take it, on exactly the same grade and same compensation as we do the corresponding positions in the university in other lines of work.

We have not had an extension division long enough to know how long the men will stay in its force. It may be that the men we have will not wish to remain, but the men that have gone into extension are of the same type as the men in the instructional force in the remainder of the university. In some cases there is a division of half time to one and half time to the other, but on a salary basis and not a basis of fees.

MR. REED: I understood Mr. Reber to say that the majority of these people doing work for

credits are graduates of normal schools. These graduates of normal schools in coming into the arts department receive some amount of advanced credit for a degree for their work done in normal schools, forty-eight to sixty hours, I assume. What part of their work toward the remaining sixty hours' work, the remaining two years' work for a degree, are they allowed to do through correspondence?

MR. REBER: One-half.

MR. ELY: I was associated with President Harper in the correspondence work at Chicago. I continued the work for a number of years. My students were mostly college graduates. One phase of the work has not been sufficiently emphasized, and that is the individuality of the men. Among my students there was one who is now a professor in Harvard. He is doing very excellent work. He did his first work by correspondence and afterward took residence work. Another is a Yale graduate who was appointed a delegate to this body but is not here today. He is doing very admirable work. Another is the president of a normal school, exercising very great influence on the educational work in a western state. One is a prominent banker in New York City. There are others who were very well worth while, some in newspaper work, journalism, authors, and so on. I had an excellent class of students, very earnest, and they did very good work. But if you can discover as the result of correspondence work of a few years several persons of the type I have mentioned, that is something that deserves consideration. It did help us to discover the exceptional man and encourage him to go forward.

MR. LOWELL: We have been trying an experiment which answers some of these questions a little, and that is, trying to give exactly the same instruction in one or two courses, three or four courses, to give them exactly the same way they are given in the university and by the same men. We have done it in that way in three courses a year on the average for the last three years, taking a course in college and duplicating it exactly with the same instruction, with substantially the same assistants of the same grade or quality who would every week quiz the class once a week, two lectures a week and one section for quiz, and examinations, similar examinations at the midyear and the final. So it is fairly possible to compare the results. And the results were rather instructive. We took instructors who were giving their own courses. The first year Professor Haskins was one of them, who gave the same course he gives in college, in exactly the same way, and gave them the same final examination.

Of course, that is in the middle of a big city, and was only done in the middle of a big city. But that is interesting in showing the results. The number of people in these courses was large. About half were squeezed out in a month or two, because they were required to do their work once a week and pass an examination once a week in the form of a short paper. In all the courses the proportions have been very much the same, about half squeezed out the first month or two months, and something less than half continued to work throughout the year, about one-fifth in each case coming up to take the examinations, doing all the work, and of that fifth, pretty near the whole of them got their final credit, that is, succeeded in passing with the pass mark. They varied somewhat in the grades they got. In some courses they did a little more poorly than the college students on the average, and in some a little better. In some cases a little less "A's," and in some a few more. It has been proved that there are a certain number of people who are quite eager to do that sort of work, and who desire to. That was an interesting thing to ascertain, and it was ascer-

tained all the more clearly because in this case the method of operation and the method of teaching and the teachers who did the teaching and the final examinations were the same. You could really test the thing side by side. We have had from nine to twelve hundred students taking those courses, and the proportions have come out not very far from equal. Of those people about three-fourths are women, about one-fourth are men. Of those who took the final examination, about one-half were school teachers, about one-half were not. The other half belonged to all kinds of occupations. Some of the people were clerks, some were on newspapers, there were occasionally a few women of leisure, living at home—very few of those—and they were mostly persons engaged in offices down town in one capacity or another. But there were not very far from one-half who were normal students, so there was one-half had no vocation.

That does show that in any large urban community, at any rate, there are a distinctly substantial number of people who want that kind of education, who want to get a little of that sort of course. They were almost all ordinary people who were working during the day, and these courses were given entirely in the evening. They occupied three evenings a week, the regular work in each course. That fact illustrates, very well. So far, that experiment was tried by having our best men and only the best men teaching, and my whole belief is that to conduct that successfully it must be our best men and men who are regularly engaged otherwise in teaching in the university. You may say, "How do you succeed in keeping them?" We don't. You see, we have only allowed them to teach once. We have taken Professor Haskins, Professor Royce, Professor Palmer, and men of that type, and got them to take the courses, but you can only ask them to do it once in a long while, and so far, by a process of rotation of crops, we have succeeded in not exhausting the soil too much.

MR. JUDSON: It has been pointed out that there are very great difficulties. There is no doubt of it. In the case of the lecturer the difficulties are the most obvious. It is hard to get a man of the right kind in the first place. It is hard to get a man who is of university caliber. It is easy to get men who are rather shallow, who don't go very far below the surface. And men of the other type, on the other hand, as far as my experience goes, after a while find it pretty strenuous and are anxious to get into residence on the staff of the university. Our own staff has shrunken somewhat in recent years, and it doesn't disturb me particularly. If the right men come, we can use them.

The correspondence work seems to be a totally different thing from that, and if rightly handled seems to me to have a very great value. I doubt, out of our experience, whether I should wish to establish a central staff for that kind of work. We would rather have a number of the men engaged in routine teaching work, who are doing with the resident students a certain thing, and we want them to do the same thing, as the president of Harvard pointed out, with the correspondence students. On the whole I am satisfied that our department does do useful things.

The question of credit isn't a very important thing. The number who would avail themselves of it would be not large. It isn't a question of a substitute for a college course. It is a question of value to those who do the work, and the work done by these people in mathematics, history, English, and other departments has been of very considerable value, as our departments think.

MR. MACLEAN: I was impressed this summer by the fact that universities like Leipzig are entering, without the use of the term, upon something akin to extension work. Of course, they

make use of their technical schools and the *Handelschule*. They go out into the centers that are readily accessible. I found that their best professors were very glad to have courses in some of these secondary schools and in the technical schools, and in turn some of the teachers in the *Handelschule* and the technical schools came to the university to give some lectures, giving it a practical turn, and supplementing the work in the seminaries for the university students.

MR. HASKINS: May I suggest a kind of demand that has arisen in some places, which has not been spoken of particularly this afternoon, the demand, namely, of cities of moderate size to have, not simply extension courses for six or twelve lectures, but a regular course of study during the year which will lead to university credit. There have been a number of cities in New England which have asked various colleges and universities to supply instruction of that kind, and the same thing has been asked within a very short radius of New York. That looks toward the same thing that President Lowell has described in Boston. They ask the same thing in cities of moderate size. The school board or superintendent or someone has in certain cases made a demand and guaranteed that a certain number of teachers would attend. The school board in one case offered to pay the expense. But I do not understand that any institution has done any work to meet this demand, which seems to be growing.

MR. FISHER: Pennsylvania has given this year a number of courses in near-by cities, in pedagogy, psychology, and history. In some cases these have been inaugurated to meet the wishes of the boards of education and a certain number of students have been guaranteed before the courses were begun. This is an outgrowth of the work that has been done at Pennsylvania for four years now in paralleling the regular courses in arts and sciences by courses in the afternoons and evenings particularly for teachers. Credit is given in these courses when the requirements for admission are met and when regular examinations are passed in the subjects, examinations of the same character and quality as are given in the regular courses in the undergraduate work.

MR. LOEB: That type of work is one that the University of Missouri has undertaken in extension work with teachers in Kansas City, St. Joseph, Joplin, and a number of other smaller towns of the state, under the auspices of the board of education and the superintendent of schools. The work in all cases represents a definite part of a course in the university, generally the equivalent of a three-hour course for one semester. It consists of at least fifteen lectures of an hour each, followed by a conference of an hour, and is given by members of the regular instructional force.

THIRD SESSION

POSITION AND IMPORTANCE OF THE ARTS COURSE AS DISTINCT FROM THE PROFESSIONAL AND SEMI-PROFESSIONAL COURSES

PAPER PRESENTED ON BEHALF OF PRINCETON UNIVERSITY BY PRESIDENT WOODROW WILSON

It is my privilege this morning to present for Princeton a paper on the position and importance of the arts course as distinct from the professional and semi-professional courses. I say that I present this for Princeton University. I think I may be reasonably sure that the opinions I am about to express are those of Princeton University, but I should prefer that you should regard the details of these opinions as my own.

I was in some doubt when I began to think this paper out—for I have not had the time to write it—as to the meaning intended to be conveyed in the title. There are many meanings that might be derived from it, but I shall take the natural meaning. I shall assume that the subject means, “What do we think of the arts course, and what is the object of the arts course, as contrasted with the professional and semi-professional courses?”

I think that it is best to start out with certain ideas that seem to be preliminary to the whole discussion. It seems to me that all specialism—and this includes professional training—is clearly individualistic in its object. I mean that the object of professional training is the private interest of the person who is seeking that training. He is seeking to prepare himself for a particular profession. He is seeking to make himself ready for a particular performance in the world which will be the means of his own support, and, it may be, of his own private distinction. His point of view, therefore, is centered in himself. His purpose is to make himself efficient for the life which he wishes to lead; and I suppose that that is the object of all special training, whether it be called professional or not.

There is a very interesting and suggestive passage in Mr. Chesterton's book on *Orthodoxy* which seems to me to illustrate a portion of this subject. He says that it is not true to say of a man who has won success and position in the world that “you can't bribe a man like that.” He says it is true only in this sense, that he has already been bribed. He has won his success by particular processes supplied him by the world as it stands. He is therefore bribed to see that the world as it stands is not changed, for fear the conditions of his success should be altered. He is under bonds to stand by the *status quo*. The *status quo* is his opportunity. To change it would be to alter his opportunity, and his whole point of view, centered as it is upon one special interest, is the point of view of that special interest.

You do not need to be told how practically all the difficulties of our national life, all the difficulties in the field of statesmanship, I mean, arise out of the jealousies and the competitions of special interests and the lack of understanding between them or of a common object. My own experience in conversing with distinguished lawyers or distinguished bankers or distinguished manufacturers is that with each one of them I have to approach the subject we are discussing from a special point of view, namely, his own, and try, if it be possible, to draw his thought and vision out to the broader field which he has for the time being overlooked and forgotten, but which, nevertheless, is the field with which he must relate himself successfully if his business is not to draw him into courses which will be against the general interest. It is this specialization of interest which constitutes the danger, I mean the intellectual danger as well as the economic danger, of our times.

I took the liberty of saying to a body of gentlemen whom I was addressing not long ago, who provoked me by the exceeding complacency of their appearance, very well-to-do men, that I thought it to be the object of a college to make the young gentlemen who resorted to it just as unlike their fathers as possible. I hastened to explain that I did not mean any

disrespect to the fathers, but merely this: that by the time a man was old enough to have a son at college he had become so immersed in some one special interest that he no longer comprehended the country and age in which he was living, and that it was the business of a college to regeneralize each generation as it came on, to give it a view of the stage as a whole before it was drawn off to occupy only a little corner of the stage and forget the rest, to forget the plot as a whole in the arrangement of its portion of it. And I believe that that is the preliminary thought with which we must approach the subject assigned to me for discussion this morning. We must realize the fact that all professional and semi-professional, all special training is individualistic in its object.

The question we have to ask, therefore, is as to the relative value, on the one hand, of a discipline whose object it is to make the man who receives it a citizen of the modern intellectual and social world, as contrasted, on the other hand, with a discipline whose object is to make him the adept and disciple of a special interest. I think that that is not an unfair statement of the subject that is to be discussed.

When you come to a discussion of the special terms of the subject, there is an initial difficulty. There is no arts *course*, if you use the term in the singular. If you look our colleges over, you will find that there is nowhere an arts course—almost nowhere. There is a miscellany of courses whose object is not professional or semi-professional. This miscellany of courses is not arranged with any organic connections. It is not arranged in any fixed sequence. It is not organized with regard to any particular congruity between its several parts. And therefore we are in the position of those who would ask, "Is it possible to have an arts course? And if it is possible, is it desirable? If it is desirable, upon what grounds is it desirable?"

Notwithstanding the fact that we have no arts course, I suppose that when we use that term we have substantially the idea which I have tried to outline already. I suppose we mean a body of studies whose object is not individualistic, but whose object is a general orientation, the creation in the mind of a vision of the field of knowledge, in some degree, at any rate, as a whole, the development of a general, catholic, intellectual sympathy, the development of a power of comprehension. I do not believe, for my own part, that the object of an arts course is knowledge. If it were, we would have to acknowledge a practically universal failure, for we all recognize the fact that a graduate of any one of our colleges, after he is ten years out, has practically forgotten all he studied as an undergraduate. If it is the knowledge that was valuable to him, he has lost it, and the value has gone out of it. What he was taught to do with his mind in receiving the knowledge, however, what he was taught to see, what he was taught to discriminate, what he was taught to sympathize with, what he was enabled to comprehend, is what he has got out of it. And if he shall have got that out of it, he has got everything out of it; for the knowledge itself is the mere material upon which these habits are formed, the habit of looking facts so steadily in the face that the atmosphere disappears from them and you see them cold as they are; the habit of stating things with precision, of reasoning with exactness,

of reasoning with fearlessness, of moving from premises to conclusion like those who desire to see the truth and desire not to be deceived: these are some of the things that a man gets out of this kind of discipline.

I heard it said very wittily the other evening that it was a very rare man who could state a fact without also stating an opinion, and I believe that the most desirable discipline for the rising youth is that he should by education be able to acquire the habit and the discrimination which must underlie the habit of stating a fact without stating an opinion.

Moreover, it seems to me that this orientation has in it a moral content as well as an intellectual. I believe that the object of the kind of discipline which we mean when we speak of an arts course is to cultivate in those who receive it a correct moral appreciation, a correct appreciation of moral values; so that they must not be allowed to confine themselves to the field of the exact sciences, for example, where sympathy is neither here nor there, where moral perceptions are involved only in so far as the student divests himself of prejudice and sincerely seeks the truth. There the subject-matter itself is non-moral, whereas the subject-matter of life is saturated with moral imputations, and all those studies which concern themselves with life should constitute a training in moral perception. The facts of history may escape our memory, but the morals of history, the operations of character, the play of motive, the distinction of integrity, may leave their lasting impression upon us.

I shall assume that, at any rate for my conception, this is the basis of the discussion we undertake this morning. It seems to me, therefore, that we have been pursuing elusive things, and are now of necessity about to return to the obvious things, the things which have been all along obvious, but of which we have been impatient because they were obvious and we were seeking the curious, the unusual, the original.

There is of course a debate as to the best means of orientation. I understand orientation to mean an ability to know the east from the west, and by that means to know where you are. I have often thought it was an extremely inaccurate expression when a man had lost his way in a desert or a jungle to say that he had lost himself. That is the only thing he has not lost. What as a matter of fact he has lost is the rest of the world. If he knew where any other thing of definite position was in the rest of the world, he would have something to steer by and he could get out. Orientation I understand to be illustrated by that. A man has found where he is in relation to the intellectual and moral content of the world, and, having ascertained his relations to other things and to other persons and to other forces, he knows more accurately where he himself is located.

I admit that it is an open question as to what the best means of orientation are. If we found upon the classical studies, we found upon the past, where unquestionably the springs of modern thought lie, but where you cannot find a very large part of the modern intellectual subject-matter. The great suggestions, the great processes, the great anticipations of all intellectual action are to be found there, but modern thought is not to be found there. If, however, we build entirely upon modern thinking and upon the modern

subject-matter of thought, we have only the short, modern view, and our connections with the past upon which it rests come only, it may be, indirectly, through the fact that modern literature of necessity and unconsciously reflects the older history of the mind. In order to get your complete orientation, therefore, in order to have the map of modern life laid before you in its entirety, it is not sufficient to build upon either of these disciplines, either the older or the newer. Each is incomplete without the other.

We have to ask ourselves then, "What are we to do in this field of almost unlimited choice?" For, while it is true that you can name a definite content for the older curriculum and a definite, though miscellaneous, content for the varied newer curricula, it is not true that it is possible to combine out of the two a single curriculum which will give you the discipline which you need in order to be a citizen of the modern intellectual and social world. We have, therefore, to resort to a choice of elements, rather than to a choice of subjects, and we have to remind ourselves before we make that choice what it is that we are seeking to do.

In the first place, we are seeking to impart discipline; and for my part, it seems to me that that is the particular thing which in our modern schemes of study we have forgotten and neglected. We have sought with a diligence which was pathetic the best means of information, but we have not sought with any degree of intelligence the best means of discipline. We have not sought to subject the mind to the processes which it needed for its undeveloped powers, but we have sought to indulge it in the use of its developed powers or of those powers the instinct and beginnings of which were already appreciated by those who possessed them. We have not sought, in other words, to find out in any systematic way whether the mind had received the proper intimations and acquired the proper habits with regard to the processes of the modern intellectual world.

Those processes are quite distinguishable, quite susceptible of being catalogued; and the discipline which the man in the modern world needs is plain enough. It is the discipline which will prepare him to act, not along a single line, but either in this direction or in another as life may lead. We are not now speaking, mind you, only of the training of scholars; we are speaking of the training of men who are to be prepared for life in general; and when you think of modern life, particularly of modern American life, you will at once appreciate the circumstance that a man must not in that life be narrowed to any one thing. If he is, he is sure all his life to be a mere servant, and he may at any moment become an unprofitable servant by the circumstance that the particular thing which he knows is cast aside and has gone out of date. Just as modern machinery is constantly being rejected and absolutely new plants substituted for the old because of new inventions, the necessity for new processes, so minds mechanically adapted to certain processes are being constantly cast aside, cast aside in a way that renders life hopeless for them, because they have no adaptability, no resource, no further outlet. They are worn out and discarded pieces of machinery. Modern life is of all things else changeable. Because it is progressive it is changeable, and because changeable it requires minds that

are changeable, that are interchangeable as between processes, as between enterprises. The minds that are to be successful must be the minds ready to turn this way or that in a varying and almost distracting world of change.

The discipline, therefore, that the modern man needs is the discipline of general preparation for the difficult tasks of our own day. And this discipline can be imparted in this general way only in its essential forms. It cannot be the discipline of process, it must be the discipline of principle. For example, it was once possible to teach most of the chemical processes employed in modern manufacture—teach them by rule of thumb, I mean. But there are so many now that it is impossible to teach them by rule of thumb, and we are, happily, driven to the necessity of teaching chemistry as pure science, the necessity of making the student drink at the fountain instead of merely searching out the lower courses of the stream—which recalls the old remark of Coke about the law, that it is better to search out the fountains than to tap the streams. Fortunately, the streams have branched into so many provinces of a great world that it is absolutely necessary that we should go back and test the waters at their fountain-head and trace them thence, if we would follow them and map them as they are.

That is what I mean by saying that all the general discipline of the modern world must be at the sources, must be fundamental, must be a process of the mind, and not a mere process of practical application, in order to be a real discipline, a process of intellectual action rather than a process of drill and information. It must set the mind in the way of doing certain things for itself, rather than put it in the position merely of learning how other persons have done them and imitating the processes that others have used.

But that is not the only thing that is fundamentally necessary. It is also necessary that there should be something for which I can find only a very big word, namely, the word enlightenment. The object of general learning is surely enlightenment. We want to come out of our provincial intellectual habit and know what the world at large is thinking and doing, what the impulses are that are moving it, what the conditions are which it must act upon if it would continue its life successfully and progressively. I do not know of any smaller word that would express the idea. And if our objects of discipline are summed up in the word enlightenment, then it is perfectly legitimate to set as our object this further purpose of giving a man the freedom of the modern world so that he will not bury his head in a particular interest, but will stand high enough to survey the field and see where the tides move, know what the general interests of society are as well as the particular interests of portions of society.

Very well, then, if these be our objects, to communicate discipline, to afford enlightenment, to make a man free of the modern world so that he will not be a yokel and a provincial and will really come out upon a stage where he can look about him and see, we must select the things that will give him the characteristic discipline of the modern world. That leads us to the point where we seek to pick out the elements of an arts course—I

mean the fundamental elements. I do not mean the particular subjects and studies, but the fundamental elements, and they seem to me to be only four—unless I have been led very much astray in my analysis.

In the first place, you must give the mind a thorough drill in some part of pure science. I use the word pure, of course, as contrasted with professional science or applied science. You must give the mind the discipline which is so characteristic of the modern world, which enables it to follow the processes and appreciate the results, and produce the results, of modern scientific thinking, in the realm of nature; the elements of pure science, not elaborated, but dwelt upon in their essential elementary conceptions and processes so long, so intensively, so insistently, that the mind can never afterward shake off the pre-possessions of scientific inquiry.

It is possible to do that, I dare say, with a single science. I am not schooled in science as I should like to be, but I assume that a central science like physics, if you kept the mind at its processes long enough and intimately enough, would be a sufficient schooling, a sufficient discipline in modern scientific method and modern scientific thinking, and that a man after that drill, if he chose to move out into other fields of science, could do so, not like a stranger but like a man who knew how to enter a new country and to follow its paths with intelligence. It is not necessary, indeed it seems to me futile, that you should introduce the student to half a dozen sciences and give him a glimpse of each. The thing that you want is not information on his part with regard to what the several sciences contain and are doing, but the scientific habit of mind fixed and ingrained by the splendid discipline of a single science that, so far as its elements and its real processes of thought are concerned, has been really mastered by the pupil.

Then it seems to me that you must have the elements of pure philosophy, by which I mean an explanation of nature and human life which seeks to include all the elements. That is a large order, and so far as my reading goes I do not know where to look for such a co-ordination and explanation; but I do know that a very interesting thing has been happening in our day, something which has its indirect influence upon the administration of universities. It used to be possible for men, without any twinges of conscience, to devote themselves exclusively to a particular science. They cannot do so any longer, because the frontiers are being obscured. I cannot now find anybody who can trace a scientific frontier between mathematics and physics, between physics and chemistry, or between chemistry and biology. It is clear enough in the center of the province where you are, but not clear on the frontiers where you are, whether you are in chemistry or physics, whether you are in physics or in mathematics; and as these boundaries disappear, you observe what is happening. Our mind is sweeping through an organic whole. We do not know when we cross from one province to another; which means that there are no natural boundaries, that the boundaries are artificial, boundaries of convention, agreed upon by treaty and not arranged by nature. There is no mountain range piled there, no great river has dug its pathway there. There is no natural, obvious boundary. You do not know, except by convention and if you carry

a map in your hand—and then you are not certain—when you have crossed from one to another.

And when you have swept this apparent circle through, you find that there is a segment lacking, a segment the lack of which all men of science are becoming aware of, and that is the spiritual segment. There is something inexplicable in it all unless you insert into this circle the segment of philosophy, in the broad sense in which I have tried to indicate it here. Until you have explained the universe in terms of spirit, you have not explained the universe at all. You may have catalogued it, you may have arranged it, you may have made a museum of it, you may have enabled us to employ the processes of it and understand how nature does this, that, and the other particular thing, but you have not explained it. That is the task, the tremendous task, of the philosopher. The modern philosopher is not trying to think merely in terms of metaphysics; he is trying to think also in terms of physics, he is trying to think in terms of the physical universe, interpreted by the human spirit. Science will be impoverished as a body of thought until that is accomplished.

It seems to me, therefore, that it is indispensable, in this general discipline which we are seeking to outline theoretically, that the mind should be led at any rate to perceive the lack of an explanation, and to understand the main attempts which have been made to explain. That is what I mean by pure philosophy: the fact that there is something to explain, the definite appreciation of just what it is that is to be explained, and so much of the history of philosophy as is necessary to know what attempts have been made to explain it. You cannot be a citizen of the modern world of thought unless you have an introduction, and something more than an introduction, a familiar companionship, with aims of that sort, and there cannot be familiar companionship unless the process is continued for a long time. If you simply go into a lecture room and hear a few lectures on the history of philosophy and come out again, you have got nothing except an impression as to the lecturer, and, it may be, a few interrogation points stirred in your mind; and the average undergraduate is not apt to have interrogation points stirred in his mind. He must have things brought to his mind again and again to have it stirred at all. He is interested in more important matters! He is interested in modern life; but he is not interested in understanding modern life, or mastering modern life. If, however, you once get him imbued with these fundamental ideas, and make these questions hold him, then his mind will lie awake at nights and think of these things, and he cannot get rid of them until he answers them. That is all I want—to get him wide awake; not to furnish him with a ready-made solution, but to get him wide awake, and to impress upon him the grim necessity that there must be a solution if he is going to live in the world at all.

Then I should say that there must be the elements—always the elements; you do not have to cover the wide field; you must go by a single road in each of these cases—the elements of pure literature. The only delight in literature, so far as I can see it, is the delight of enlargement. I suppose we read books of travel because we cannot travel thither ourselves. If we could, I would very much prefer to go than to read another man's travels.

I suppose we venture into fields of reading which are not distinctively our own because we would like to be so many things that we are not, because the world is so narrow in our little piece of it, because we want the adventures of life and cannot have them all, because we want to experience the thrills which have stirred other minds than our own, and have moved within the spirits of other men but not within our own. We want to take the walls down from the room and sweep the horizon and know what airs are astir that we did not originate, and have as yet never breathed.

And these visions of the mind, the whole realm of poetry and creative prose, the realm of insight and interpretation, are the regions in which we refresh ourselves and breathe an upper air which keeps our lungs fit for the more sedate and mundane things we have to do. I pity the man who cannot get this dissociation and removal from the actual world occasionally, this refreshment on the uplands, which are ready to his mere desire, if he only entertain it. For my own part, I must say that in my own studies, in the field of politics, I have found more true political interpretation in the poets than I have ever found in the systematic writers on political science. The systematic writers on political science will tell you a great many interesting things, but they interpret almost nothing for you, and some sudden light flashed in a single line of poetry will sometimes interpret more politics to you than you can find in the bound volumes of the political science library; because the poet has suddenly seen what the human heart is striving for out there in the field of politics, has uncovered that; and after you have seen it you know what the significance of your study is.

The field of pure literature is the field of the interpretation of the human spirit apart from those explicit problems of explanation which lie in the field of philosophy; and of course, as you know, in writers like Browning the fields are hardly distinguishable. The poetry is philosophical and the philosophy is poetical. You feel all the unseen forces of a great world stirring there, and a great mind feeling after them, not with the perception of a scientist, but with the instinct of a seer. How could a man be a citizen of the modern world unless he felt all of these things?

And then, I dare say, we would all admit that the field of history and politics is a necessary part of a lad's introduction into the modern world. I shall not dwell upon that, because perhaps it is my own prepossessions which lead me to think that that is one of the necessary elements, but I dare say that is obvious enough.

Now, if these be the elements, if our object be discipline, enlightenment, orientation, and our means pure science, pure philosophy, pure literature, and the facts of history and politics, all of which can be accomplished simply and by uncomplicated courses of study—not the same for every man, but nevertheless with the same elements in every arrangement—then we have to ask ourselves what the method shall be.

In the first place, the method, it seems to me, obviously should include a definite choice of studies. I am assuming that, while each man will be directed to discipline of each kind, there will be a variety of choice by which he can get each kind of discipline. There ought,

therefore, to be a definite choice of studies, a systematic sequence of studies, and a systematic combination of studies. Faculties must establish the sequences and the combinations. The student must make the definite choice, definite within the range of his prepossessions and instinctive apprehension as to his own powers, his own tastes, if you will, but nevertheless not a miscellaneous, haphazard, dispersed choice, but a definite choice, a choice guided and limited by the systematic sequence and the systematic combination arranged for him before he makes it. It seems to me that these constitute the necessary characteristics of the method by which we must seek this discipline. I do not want to tire you with more of this, because it seems to me obvious. I want to go on. If that is what we mean—and that is what I mean—by an arts course, I want to speak of the relationship between it and the professional or semi-professional studies.

I hardly think it worth arguing that a man needs this sort of training before he becomes a special student in any field of scholarship. After all, one of the most significant things about any subject is the way it is related to other subjects. The only field in which I have had experience with advanced students is the field of history and politics, and the most noticeable thing about that field and what is going on in it in advanced study is the number of mares' nests that are daily discovered by advanced students, the number of things that are discovered that were discovered also a great many years ago, and most of which have been discredited and disproved a great many years ago.

A one-time colleague of mine undertook the very ambitious task of drawing all the arts together under a common set of categories and principles. He wrote a book on the subject and carried it to a colleague of his, who was not supposed to be read in the field of art particularly, but who was generally read in the field of knowledge, and asked him to read it and tell him what he thought of it. He read it and then said, "Why, my dear fellow, the trouble about this is that it has been exploded ever since Aristotle." If you do not know the things that have been exploded ever since Aristotle, you are going fruitlessly to retraverse the fields that lie between us and Aristotle; and in the field of history, particularly, most of our advanced students, not knowing the general field of history, and seeking to cultivate little pieces of it, are constantly misinterpreting the facts which lie within those little fields, because of their inability to understand the relationships, to understand the things already known, already established, the conclusions already set up, and the facts which must lie neighbor to these and condition their whole significance. I say that it seems too obvious for argument that no man can afford for his own intellectual safety to specialize in any field until he has traversed enough of the general field of knowledge to know the relation of his special field to the general field and to check his processes by the established intellectual processes of the world.

The constant trouble with literary study, the constant trouble, more conspicuous than elsewhere, perhaps, with philosophical study, is that the men who cultivate those special fields have not been trained and made familiar with the fields which are of an entirely different character but which, nevertheless, so intimately relate to modern thought that

every field must take cognizance of them. I mean that a psychologist who does not know science is an incompetent psychologist; that a man who tries to cultivate literature without knowing what are the hard substances upon which the modern mind bites in the whole field of the physical universe will merely pursue shadows, merely fall in love with fancies and phantasms. And so it is dangerous for a man to be at large without a guardian who does not know his whereabouts and consequently the dangers amidst which he is walking in the modern field of knowledge.

When you carry this into the professional field, take for example the lawyer and the engineer. The engineer, in a degree which few persons who are not engineers realize, deals with modern life as well as with structural and constructive processes, and unless he can deal with men and understand circumstances, he cannot be a successful engineer in the higher ranks of the calling. Modern manufacturers, for example, of the structural parts of bridges, are just as likely as not to have an order placed for a bridge to be erected somewhere in the heart of India, and they are asked to send out their own engineer, understanding their own methods of construction, to put the bridge up; and if they send anybody out who is ignorant of India, not only as a climatic condition, but also as a labor market, and doesn't know the motives and the impulses and the singularities of coolies, he might as well stay at home. The modern engineer must know the modern world in order to undertake the principal tasks of his profession. And the modern lawyer, clearly, must understand the modern world, because he is dealing with a larger variety, perhaps, of modern circumstances than the man of any other profession, except the minister; and the minister does not have to deal with it in a way that can get men into jail. The modern minister does deal with all the difficulties of the human mind, but so does the modern lawyer deal with the difficulties of modern business, and a man merely schooled in the principles of the law as divulged in the textbooks and cases is not prepared for his profession.

I was myself bred for the law, and as long as I could stand it, followed it as a profession, and therefore I know something about law and something about lawyers. I was led, therefore, not long ago, in addressing the Cleveland Chamber of Commerce, to make some disagreeable remarks. I was talking about the modern trust problems and the ignorant attempts of modern legislation to correct the evils that we all wish to see corrected, and I said that I had no doubt that there were a large number of lawyers who were the trusted advisers of corporations among the company that was listening to me, and that I had something to say to them. I said, "You complain that the legislation now being attempted against corporations is ignorant and mistaken, and may be ruinous, and I agree with you; but if I wanted to formulate a different sort of legislation which would be effective and beneficial, I would have to ask you what sort it ought to be, because you know what is going on, and you know how it could be corrected. If, therefore, you want really to serve the corporations which employ you, and to save them from ruin, you will take charge of the processes of reformation and advise the reformers. If you do not, the day of reckoning will come, which will be a day of ruin, and you only will be to blame. Now, having said

this," I added, "and being a lawyer myself, I know you won't have sense enough to do it." It is as Burke long ago said; the study of law is one of the best of mental disciplines, but it does not in the same degree liberalize the understanding; and so the lawyer merely sticks to the processes which stand in the way of progress. He cannot think in any other terms; and yet the modern lawyer, if he is really to live, must confess himself, come out in the world, and be ready to aid in the processes of that world. He cannot do it ignorantly; he cannot do it unless he knows what they are. In most cases he has hurried through a miscellaneous arts course, or skipped it altogether, and has gone from the high school into the law school, and there has saturated himself in the stiffest and most conservative side of social life, the side which goes by formula, the side which goes by rule, the side which goes by precedent and thinks it impety to make breach of a precedent; whereas the progress of the world makes havoc with precedents, and necessarily so. If you are going to have an unschooled, untried, uninitiated rustic—speaking only in terms of the mind—going into the legal profession, you have condemned him to be an insufficient instrument of the great profession which he has joined.

When we speak, therefore, of the relation of the arts course to the professional courses, we are speaking of the relation of the foundations to the edifice, we are speaking of the relation of the understanding to the career. It is the relation between comprehension and action, and you cannot establish this relationship successfully in any other way.

I of course recognize the fact, as everybody does, that there are exceptional individuals who need no formal training, no exact, definite introduction, who have the genius to perceive and to perceive in large terms the moment they are put into the midst of circumstance; but these are the exceptional men, and these are not the men for whom our arts courses are provided. They are generally the men for whom our arts courses are often intolerable, because it is, for them, like harnessing Pegasus; there is nothing that you can teach him in the way of aerial locomotion.

I would conclude by this suggestion, that professionalism in learning has the same effect upon the intellectual world that professionalism in sport has on the world of sportsmanship. The minute professionalism enters sport it ceases to be sportsmanlike. The minute professionalism enters learning, it ceases to wear the broad and genial face of learning. It has become a commodity; it has become something that a man wishes to exchange for the means of support. It has become something that a man wishes to use in order to get the better of his fellow-men, to enhance his fortunes, to do all the things that center in and upon himself. It is professionalism that spoils the game, the game of life, the game of humanity, the game of co-operation in social undertakings, the whole handsome game that we are seeking to throw light upon by the processes of education.

This, then, seems to me the position and the importance of the arts course as distinct from the professional and semi-professional courses.

DISCUSSION OF THE POSITION AND IMPORTANCE OF THE ARTS COURSE

[ABRIDGED FROM THE STENOGRAPHIC REPORT OF THE PROCEEDINGS OF THE ASSOCIATION]

MR. BIRGE: I am in hearty sympathy with every word that has been said by President Wilson and I need not further express my concurrence with the speaker. I am going to limit myself to bringing up a concrete difficulty that has been before me in my own relations to the arts course for a good many years.

Thirty years ago, I went to Europe for a year's study with the definite purpose of there getting information and methods which would enable me to aid in making better and broader the preliminary study of men who were expecting to go from their arts course into medicine, and a good deal of my thought has been given to that particular line of work since that time. In the course of these years I have been concerned in introducing into our college of letters and science courses of study which my colleagues have thought to be semi-professional, possibly have thought to be professional. They may have felt that these changes have injured the course in arts, judged from the point of view of the speaker of the morning.

There is truth in their contention regarding these matters; and yet, so far as my own intention has gone, and so far as the intention of my colleagues in this and other universities is concerned, we have had in mind exactly the purposes in our work which the speaker has so well emphasized this morning. It has been our intention not to provide individualistic training for the men who have taken these courses, but it has been our fundamental purpose to enable the man to orient himself in the field which was our immediate concern, the field of science, not as a professional field so much as a part of the field of life.

We should not quite have dared to define our purposes for the undergraduate as broadly as the speaker defined the aims of the science part of the liberal arts course. These purposes have underlain our work, yet we have hardly expected that our students would, as undergraduates, acquire any clear and distinct conception of the method and spirit of science. We have been content if we could see in them a small beginning of the scientific spirit. This we have tried to develop in them. We have not attempted to teach them processes, except as some knowledge of these is necessary even for a first orientation in that part of the field of life which is now controlled by science.

This has been our work, and I think it has been necessary, and not unworthy of the arts course. In doing it we have aided in making profound changes in that course, not because we have desired to crowd out other studies, but because we must have time to secure the results at which we aimed. From this source have come the troubles in the arts course—from the enlargement of knowledge in new and diverse subjects, each important in life and each demanding its own methods and time for acquiring them.

Consider the terms in which President Wilson stated the rightful aims of science in the arts course, and ask how much time is needed to secure similar results in letters. I can give a rough estimate from my own experience, which is like that of most of us.

I had the great, the inestimable advantage of the old-fashioned classical college course, and I cannot speak too warmly of what it did for me. In that course, nothing did me more good than the study of Latin. I should not have described my relation to Latin as the speaker described the ideal relation of the student in the arts course to science, and I am very sure none of my teachers would describe it in those terms. And yet how much time did I give to it? Substantially seven

years of daily work was devoted to the study of Latin. Now, is a man going to secure the scientific method, is he going to secure orientation in the field of physics, on cheaper terms or at an easier rate than I secured that partial introduction to the study of language in Latin? We must answer "No," and in so answering must admit that the great problem which we must face in the arts course is the adjustment of the time given to it to the enlarged course of study; or rather (to state the problem in the terms in which it actually presents itself), "What must we sacrifice of the traditional work of the arts course, which we value as highly as anyone can, in order to secure the chance of orienting our students in other and, we believe, equally important fields?" The changes which science has made in the arts course have come from this necessity, not from a desire to crowd into the course semi-professional studies or to make it the means of teaching processes.

No, we too are endeavoring to orient our students, and we regret that we cannot accomplish this, even inadequately, without calling for the sacrifice of other valuable things. But in this we who teach science are not alone; the "new humanities" in their turn are displacing both the older humanities and science. We find, for instance, in Wisconsin, what doubtless you find in other institutions, that the drift of the men today who are not looking toward professional life is in the direction of politics and political economy; less, perhaps, but next to those, in the direction of history. In these departments they are taking studies which, in my judgment, are as semi-professional as the studies which the scientists are offering. The drift in that direction is because the men feel that they need not so much knowledge as they need orientation, so that they may adjust themselves to the complex problems of modern life. This orientation in the field of society demands so much time that the other, to my thought equally important, and perhaps more important, orientation in the field of letters and the field of human spirit, is crowded out. There is our difficulty, and this is the situation which we are bound to face, that the time at our disposal is not sufficient to enable us to secure for our students that freedom of the intellectual world which could be given in the arts course when the intellectual world was smaller and when it was not so closely bound up with the practical matters of human life and human society.

MR. VAN HISE: Like Dr. Birge, I must begin by expressing unbounded admiration for the statement that has been presented to us, and my feeling of agreement on every fundamental point. If the ideas of the address are carried out, it follows that there must be election under system rather than heterogeneous browsing. And this is a point of great practical importance in many institutions. It has been our feeling and the feeling of many of us that the protest against the narrow curriculum of the past, which resulted in unrestricted freedom of election along all lines, resulted in just this thing, and that the true course is an intermediate one, of liberty of election under system. It seems to me that the practical deduction which follows from the premises leads to rather radical modification of requirements in many institutions.

And, second, though I have no idea that the speaker so intended, it seems to me that he did not quite do full justice to the professional school and the students of the professional schools in one particular. It was intimated that the purpose of the student of the professional school is to get a livelihood, to achieve success. I have no idea that that was intended as a complete statement, but only a partial statement of the purpose of the professional school. In the better professional schools at the present time, in the faculty and among the students, there is very strongly developed the feeling of service. The man who wishes to build a bridge in India, we will say across the Ganges, is not thinking of his own advancement simply in building that bridge, but is thinking of service to

the people of India. And this new spirit in the professional schools, for it is in part a new spirit, it seems to me ought to be stimulated, ought to be developed.

The professional studies should be carried on in the same spirit as the liberal arts are studied. This can be done. It is being done. There are two ways of teaching a professional subject. A professional subject may be taught as a series of rules of thumb, a series of rules to be applied which really do not go back to any fundamental principles. A course in railroad engineering may be a descriptive course in the practices and processes of the engineer. In that form it may make a better practitioner in railroad engineering the first year that he goes out, but if taught in that form, the engineer will be very severely limited in his practice a few years hence. Or civil engineering may be taught as an applied science, the roots of which are a few great principles of mechanics and mathematics, and it may be so taught that its effect on the mind is exactly the same as in the liberal arts. The great defect of schools of applied science is that they are trying to teach too many things, too many details, to tell how many bricks there are in a furnace or a door and how tall a furnace should be, and not to learn about the fundamental principles of chemistry that are illustrated by the processes which go on in that furnace.

So that the great and fundamental problem of the schools of applied science is to transform them until they are all taught in the spirit of the liberal arts.

MR. KEPPEL: I wanted to find out how much direct influence the college course had on students in directing what their life work was to be, and I sent out about six hundred letters of inquiry to recent graduates from the liberal arts course, and got about four hundred replies.

I was very much impressed, first, with the fact that in so large a majority of the cases the man knew what he was going to do before he went to college at all; and, in the second place, with the number of people who decided on professional careers because of the opportunities for service which were offered. Very often it was a professional course you would not think would lead to public service. One man who wanted to be a missionary took an engineering course, because he thought he could be of immediate practical value to the people he wished to serve. The number of men upon whom strongest influence was the opportunity for service was surprisingly great.

Another thing that came to my mind is the importance, not merely of the laying-out of any particular program to get these four elements into the man's character, but the saturation of the place, no matter what the subjects taught, with the spirit of them. At the Massachusetts Institute of Technology when General Walker was president, the curriculum was obviously not that of the liberal arts college, but somehow or other the Institute got that spirit to a remarkable degree into the lives of the men that went there.

MR. LAUGHLIN: The admirable and clear exposition of the position of the arts course just given by the representative of Princeton is one that we must all accept. There is no question about it. But in the instance brought up with regard to the American engineer who might be called upon to build a bridge in India, it seemed to me that the whole fundamental difficulty of the arts course is brought up. The suggestion was made that it would be impossible for such a man to be sent there who had not had the capacity of adaptability, to adjust himself to those conditions of labor, climate, and what not. Now, obviously, in any kind of instruction that we could give in the universities, we could never hope in an antecedent way to prepare an engineer or any other man taking up tasks of that kind in all the detailed facts of climate, of labor conditions, or the knowledge of racial characteristics in all the countries in the world to which an engineer might possibly be sent.

Obviously, then, it is not a passing-out of knowledge, of information, as President Wilson has so admirably put it.

Then what is it that we should set before us as the objective? Clearly, we are supposed to give that man the flexibility of mind, the intellectual sympathy, the power to assimilate the things that he needs at the time and in the place when he is called upon in an emergency to use them. In other words, the objective in the arts courses, not being solely knowledge, is to bring about the creation of a certain class of mind, and also, as a matter of course, a certain kind of character.

Then the problem primarily is one of means to that end. If we know what our objective is, how are we going to arrive at it? Already, as in the suggestions which President Lowell and others have made about the elective system, we seem to be rearranging the situation so that, as it has already been expressed here, the choice of the student is regulated by a certain amount of restriction of liberty assisted by certain guidance in the order and the grouping. Our difficulty is not in the end going to be so much in getting successful guidance or in getting a wise choice. The fundamental difficulty, if I apprehended it rightly, is going to be, then, in the means to the end, in the means to be found in our teaching to create the kind of mind that we have just been trying to produce.

We have all known the fact that the man in the professional school works with a different spirit than the ordinary, rather irresponsible person that we often find in the undergraduate departments. We should hope to have in the arts course some of the spirit that the professional man shows in his course. You can't blink the fact that self-interest is a very important part in the motives of life and in the motives that induce men to get an education, and you will have to use that force. That, then, brings us to this point, that as a creation of means to the end, it is perfectly clear that, in our methods of teaching we must make a proper use of those things that will appeal to the self-interest of the student. I do not mean thereby to suggest that the professional spirit should be introduced; but we have got to make use of self-interest in our methods of teaching and that, it seems to me, is already appearing in the change in the spirit of our teaching, so that the teaching is coming to be really adjusted to the life that the student is going to live when he goes out.

Therefore very much depends upon the personality, the skill, the insight of the teacher, his knowledge of human nature, whether he is using the *materia*, the knowledge that he is imparting, in such a way as to convey to the man the attitude toward life that he must adopt, and, more than that, the kind of mental appreciation, flexibility, and adaptability. That brings us right back, then, practically, to the character of our teachers and to the quality and methods of teaching, and it is in that regard we need the greatest thought, and in that regard we need great improvement. And I believe it is coming. The emphasis on the better methods of teaching, so that we have a laboratory system, a problem system, a system that teaches the man to think and to adjust himself to a new problem and a new situation, even in the arts courses, is the thing that is going to train a man to think on his feet and to adapt himself to new emergencies and to new conditions whenever they are presented. In other words, the old lecture system is about as bad as it could well be for that method. The old textbook system is equally tabooed. With the new man, with the man who really wants to put into his students the sense of social service, who really wishes to put into his men the possibility of adjusting themselves to life, he finds that the knowledge that he is teaching, the conditions around him, are happy instruments by which he can convey his purpose. It comes down to the kind of man you put into the teacher's chair.

APPENDIX I
FINANCIAL REPORT FOR THE YEAR 1909-10

RECEIPTS:

| | |
|------------------------------------|-------------------------|
| From assessments 1909-10 | \$380.00 |
| Interest | 11.40 |
| Balance | 406.01 |
| | <hr/> \$1,297.41 |

EXPENDITURES:

| | |
|---|-----------------------|
| For reporting Tenth Conference | \$ 64.89 |
| For printing proceedings, Tenth Conference | 266.00 |
| For distributing journals and reprints | 29.74 |
| For printing reprints from Tenth Conference | 27.50 |
| For postage, express, telegrams, and sundries | 30.31 |
| For printing programs, Eleventh Conference | 11.00 |
| Exchange | <hr/> .86 |
| | <hr/> \$430.30 |
| Balance on hand January 4, 1910 | <hr/> \$867.11 |

APPENDIX II

THE REPORT OF THE SPECIAL COMMITTEE ON UNIVERSITY NOMENCLATURE

The committee on nomenclature submits the following supplementary report:

A circular was sent to the president of each of the institutions in the Association of American Universities, asking information as to the extent to which the terms recommended by the Association, namely, department, course, college, and school, are used as recommended by the Association, and also asking suggestions in reference to the definitions of the terms group, curriculum, and division, re-referred to the committee.

The following institutions report that, with minor exceptions, department, course, college, and school are used as recommended: California, Chicago, Columbia, Harvard, Indiana, Johns Hopkins, Leland Stanford Junior, Missouri, Nebraska, Pennsylvania, Princeton, and Wisconsin, twelve in number. The exceptions are as follows:

Chicago uses *school* for education, but intimates that this is to be changed to *college* in accordance with the definition recommended.

Harvard uses *school* for the dental division, but expects to raise requirements and thus make the usage accord with the recommendation; also *department* is applied at Harvard to a considerable number of foundations in the sense recommended for division.

Missouri uses *department* for the main divisions of the university.

Nebraska uses *school* in a secondary sense, subordinate to college.

Pennsylvania retains *school* for the Wharton School and the summer school, the first of which under the definitions should be classified as a college.

Wisconsin uses the word *course* in the sense of curriculum, as well as in the sense recommended; also music is classified as a *school*, although the admission requirements are only high-school graduation.

Of the institutions mentioned, Missouri, Pennsylvania, and Wisconsin report that changes have been made in consequence of the recommendations of the Association. Possibly other institutions not definitely making this statement have made changes for the same reason.

The following institutions either report that no action has been taken in reference to the recommendations, or make no report at all: Catholic, Clark, Cornell, Illinois, Iowa, Kansas, Michigan, Minnesota, Virginia.

Of these institutions, Michigan reports that the matter has been referred to a committee of the faculty for consideration and that probably changes will be recommended in accordance with the definitions.

Minnesota reports that the changes are approved, but will wait until the matter is settled before adopting the recommendations.

Yale reports only on *department*, which is still used in two senses, that recommended by the committee, and as applying to the major divisions of the university.

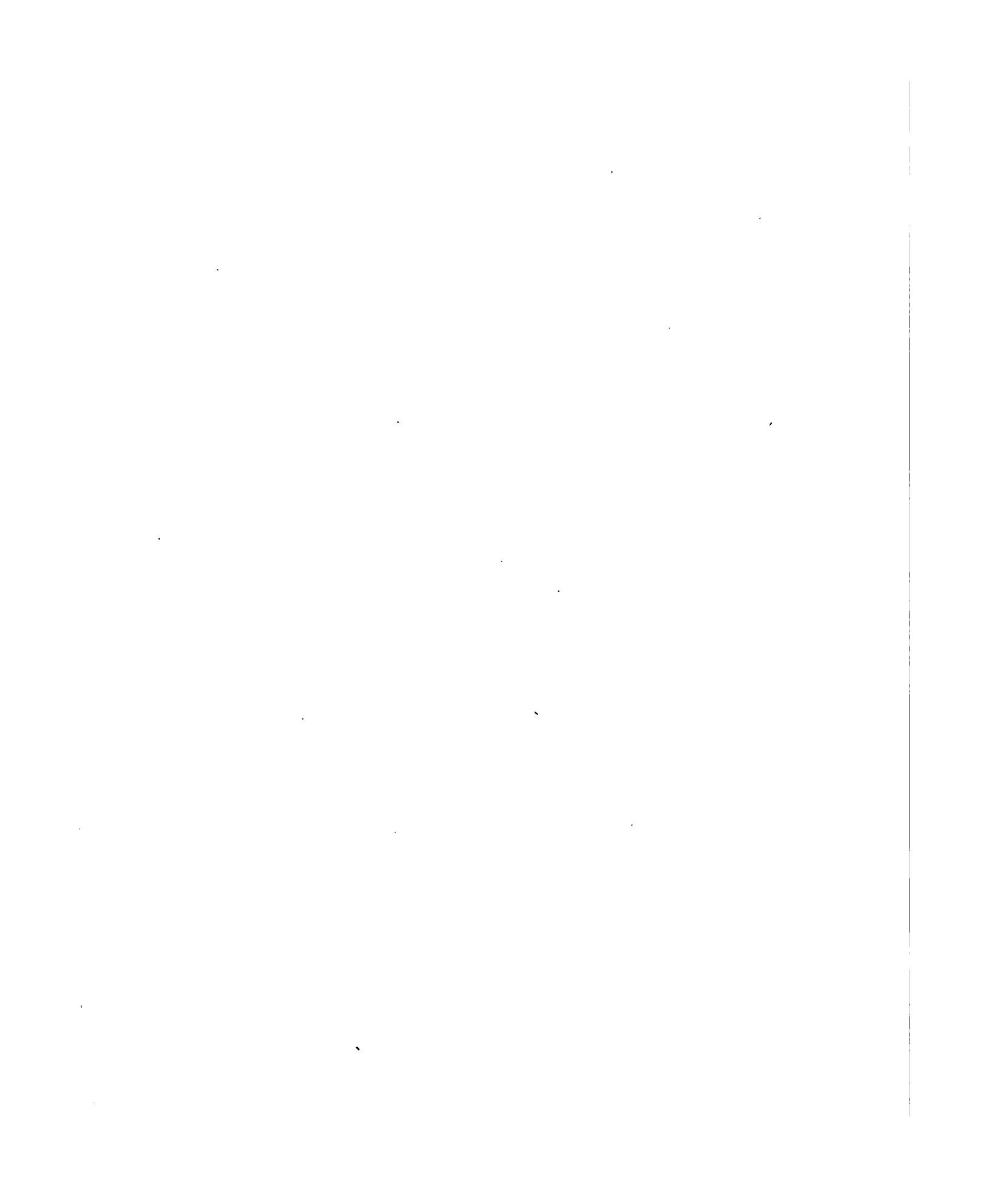
In reference to the definitions of the terms group, curriculum, and division, re-referred to the

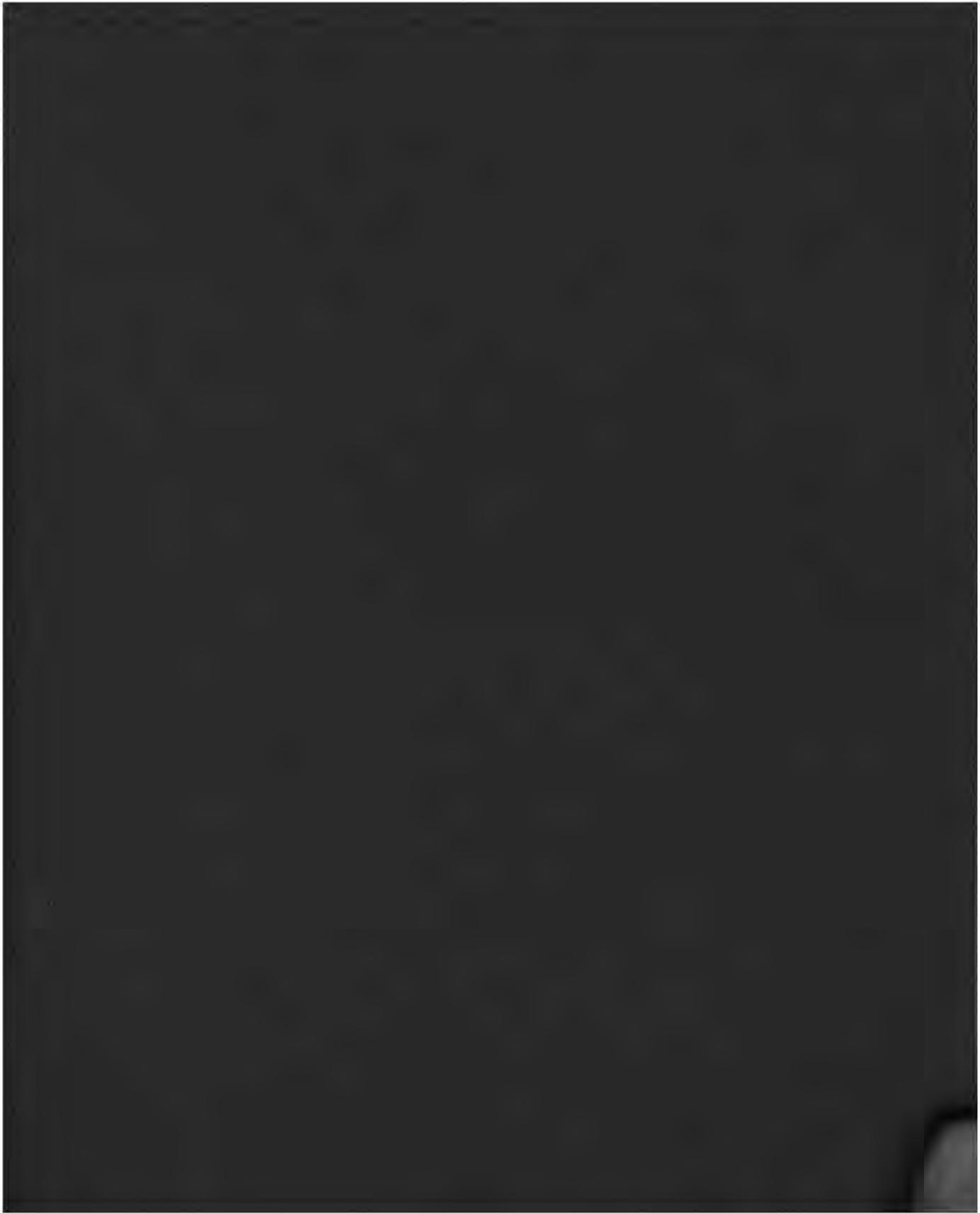
committee, the institutions mentioned below are favorable to their adoption, although some of them do not now use all of the terms, nor some of them in the exact sense recommended: Chicago, Columbia, Iowa, Johns Hopkins, Leland Stanford Junior, Pennsylvania, Princeton, and Wisconsin. A qualification should be made in the case of Columbia. That institution objects to the definition of the term *group*, and prefers that it be defined as a combination of courses rather than a combination of subjects.

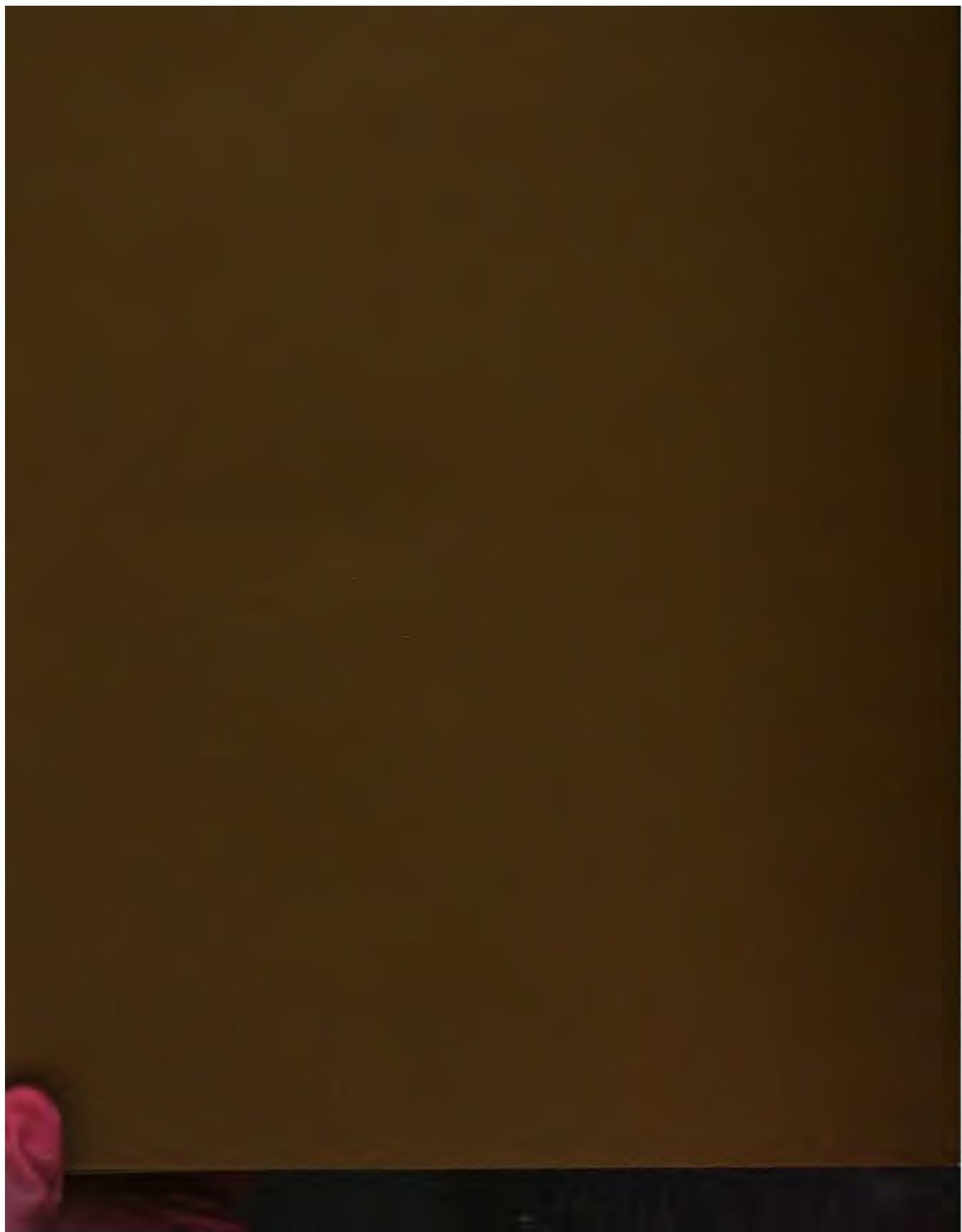
The only institution that does not favor the adoption of these terms is Harvard.

Since the greater number of opinions expressed are in favor of the adoption of the terms group, curriculum, and division, your committee recommends them to the Association with the definitions submitted last year:

1. That the term *group* be restricted to a combination of related subjects.
2. That the term *curriculum* be restricted to a combination of courses leading to a degree.
3. That the term *division* be used to indicate any organic portion of a university which is larger or more independent than a department.



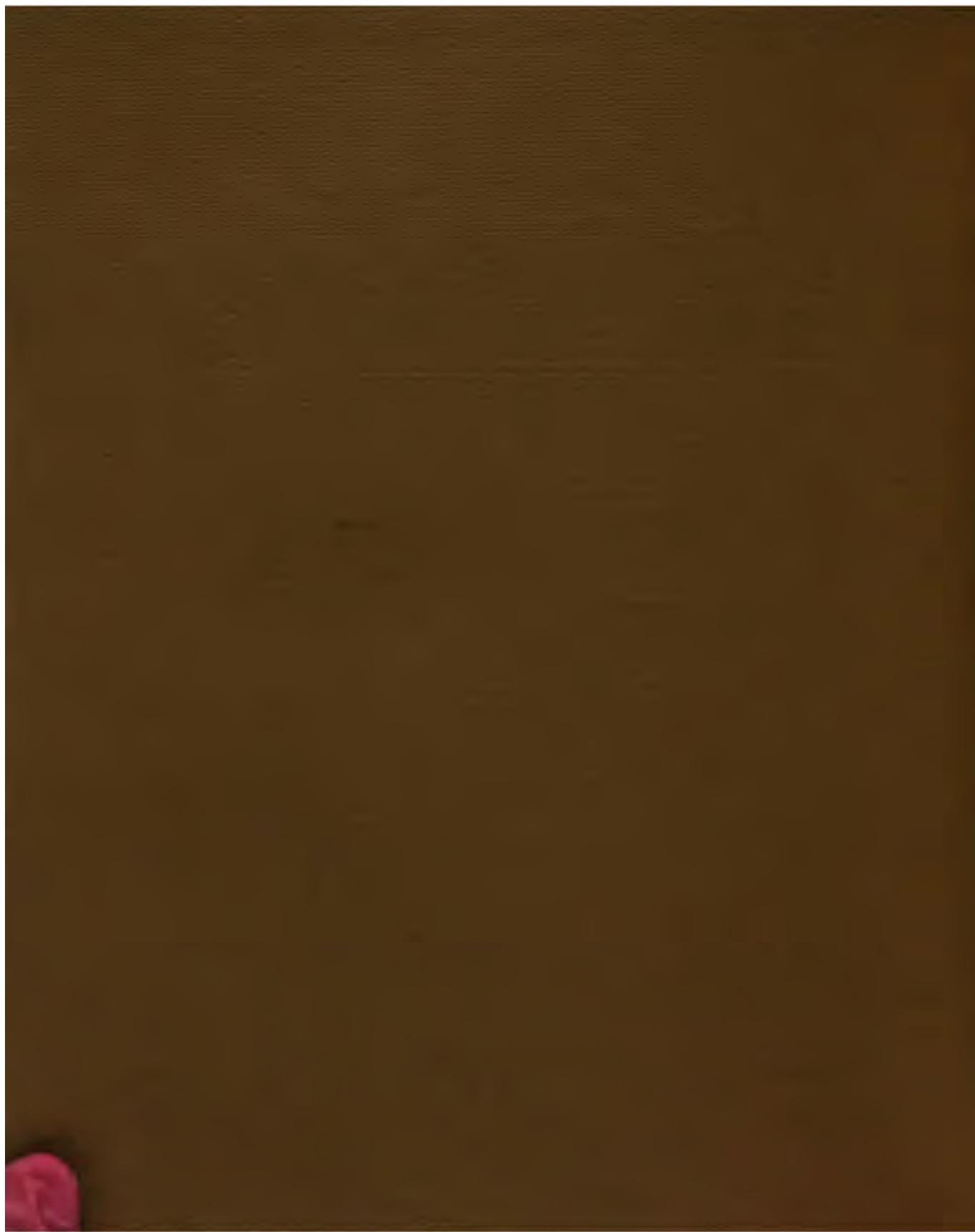




*The ASSOCIATION
OF AMERICAN
UNIVERSITIES*

*The Twelfth
Annual Conference*

*CLARK UNIVERSITY
WORCESTER, MASS.
JULY 22-25, 1935*



*THE ASSOCIATION
OF
AMERICAN UNIVERSITIES*

1910-1911

The Association of American Universities

JOURNAL
OF
PROCEEDINGS AND ADDRESSES
OF THE
TWELFTH ANNUAL CONFERENCE

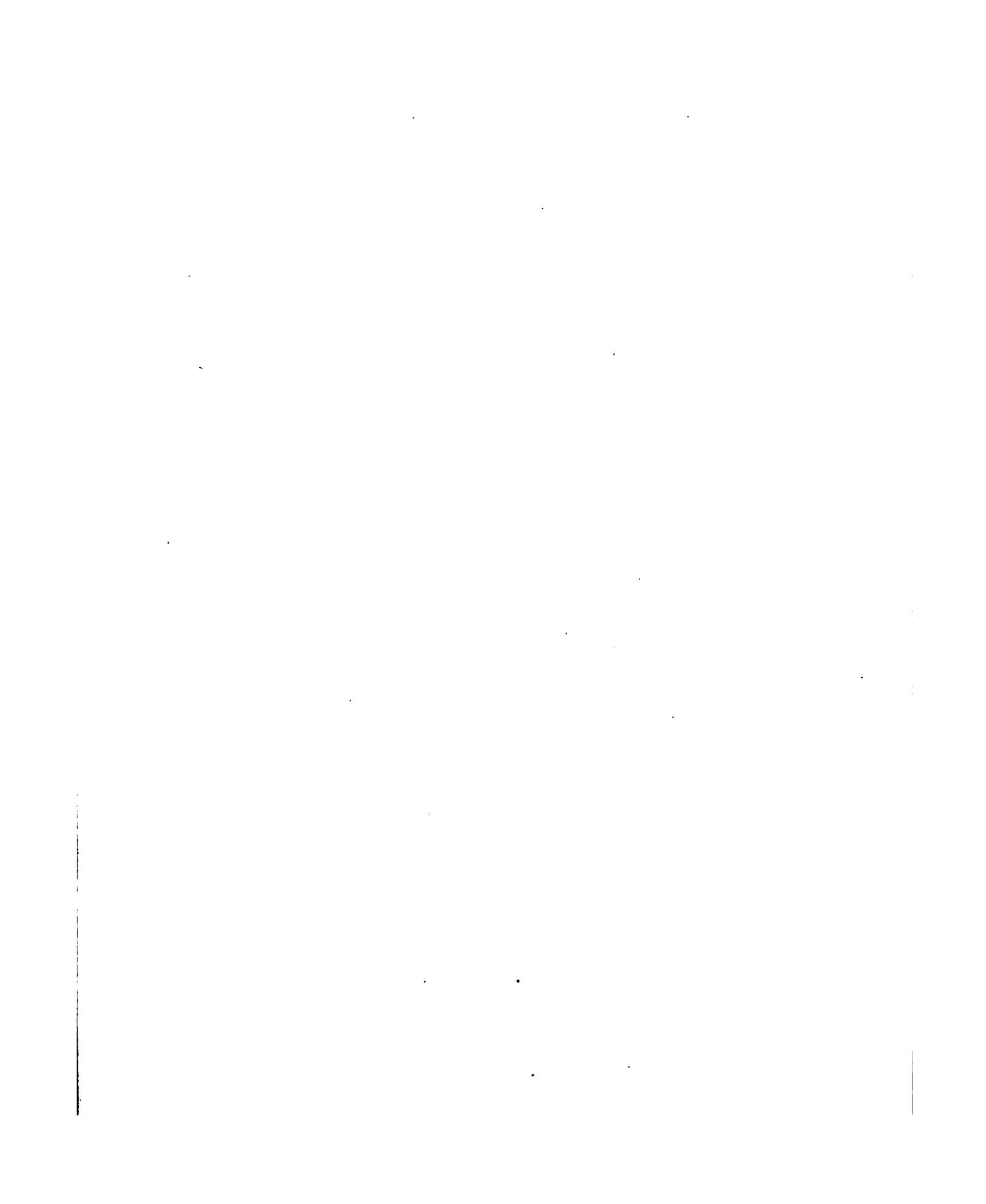
HELD AT
THE UNIVERSITY OF VIRGINIA
NOVEMBER 10 AND 11
1910

1911
PUBLISHED BY THE ASSOCIATION

Composed and Printed By
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CONTENTS

| | PAGE |
|---|-----------|
| MEMBERSHIP | 7 |
| CONSTITUTION | 9 |
| CALENDAR OF CONFERENCES | II |
| OFFICERS | II |
| PROCEEDINGS OF THE TWELFTH ANNUAL CONFERENCE | 13 |
| EXECUTIVE COMMITTEE MEETING—MINUTES | 13 |
| FIRST SESSION—MINUTES | 13 |
| FIRST SESSION—PROCEEDINGS | 17 |
| SECOND SESSION—PROCEEDINGS | 34 |
| THIRD SESSION—PROCEEDINGS | 50 |
| PAPERS AND DISCUSSIONS AT THE TWELFTH ANNUAL CONFERENCE: | |
| THE FIRST SESSION: | |
| PAPER ON “ <i>Combined Courses in Academic and Professional Work</i> ” by Mr. Bryan | 17 |
| DISCUSSION by Mr. Lowell (pp. 25, 26, 29, 31); Mr. Bryan (p. 26); Mr. Jordan (pp. 26, 28, 29); Mr. Haskins (p. 26); Mr. Conklin (pp. 27, 31); Mr. West (p. 28); Mr. Barrows (p. 28); Mr. Page (p. 28); Mr. Wilcox (pp. 29, 31, 33); Mr. Chittenden (pp. 29, 30); Mr. Carpenter (p. 29); A Delegate (p. 30); Mr. Judson (p. 32); Mr. Dabney (p. 32); Mr. Reed (p. 33). | |
| THE SECOND SESSION: | |
| PAPER on “ <i>The Degree of Master of Arts</i> ” by Mr. Calvin Thomas | 34 — |
| DISCUSSION by Mr. Ames (p. 45); Mr. Van Hise (pp. 45, 47, 49); Mr. Haskins (pp. 46, 47); Mr. Seashore (p. 46); Mr. Barrows (pp. 46, 47); Mr. Thomas (p. 47); Mr. Merritt (p. 48); Mr. Downey (p. 49); Mr. Jordan (p. 50); Mr. Davenport (p. 50). | |
| THE THIRD SESSION: | |
| PAPER on “ <i>The Appointment and Tenure of University Professors</i> ” by Mr. Van Hise | 50 |
| DISCUSSION (p. 61). | |



MEMBERSHIP
OF
THE ASSOCIATION OF AMERICAN UNIVERSITIES

| | |
|------------------------------------|---------------------------------|
| UNIVERSITY OF CALIFORNIA, | Berkeley, California |
| — CATHOLIC UNIVERSITY OF AMERICA, | Washington, D.C. |
| THE UNIVERSITY OF CHICAGO, | Chicago, Illinois |
| CLARK UNIVERSITY, | Worcester, Massachusetts |
| COLUMBIA UNIVERSITY, | New York, New York |
| CORNELL UNIVERSITY, | Ithaca, New York |
| HARVARD UNIVERSITY, | Cambridge, Massachusetts |
| UNIVERSITY OF ILLINOIS, | Urbana, Illinois |
| INDIANA UNIVERSITY, | Bloomington, Indiana |
| THE STATE UNIVERSITY OF IOWA, | Iowa City, Iowa |
| THE JOHNS HOPKINS UNIVERSITY, | Baltimore, Maryland |
| UNIVERSITY OF KANSAS, | Lawrence, Kansas |
| LELAND STANFORD JUNIOR UNIVERSITY, | Stanford University, California |
| UNIVERSITY OF MICHIGAN, | Ann Arbor, Michigan |
| UNIVERSITY OF MINNESOTA, | Minneapolis, Minnesota |
| UNIVERSITY OF MISSOURI, | Columbia, Missouri |
| THE UNIVERSITY OF NEBRASKA, | Lincoln, Nebraska |
| UNIVERSITY OF PENNSYLVANIA, | Philadelphia, Pennsylvania |
| PRINCETON UNIVERSITY, | Princeton, New Jersey |
| UNIVERSITY OF VIRGINIA, | Charlottesville, Virginia |
| UNIVERSITY OF WISCONSIN, | Madison, Wisconsin |
| YALE UNIVERSITY, | New Haven, Connecticut |

|

**THE CONSTITUTION
OF
THE ASSOCIATION OF AMERICAN UNIVERSITIES**
ADOPTED FEBRUARY 28, 1900

I. NAME

This organization is called **THE ASSOCIATION OF AMERICAN UNIVERSITIES**.

II. PURPOSE

It is founded for the purpose of considering matters of common interest relating to graduate study.

III. MEMBERSHIP

1. *Qualifications.*—It is composed of institutions on the North American continent engaged in giving advanced or graduate instruction.

2. *Initial Membership.*—Its initial membership consists of the following institutions:

University of California
Catholic University of America
The University of Chicago
Clark University
Columbia University
Cornell University
Harvard University
The Johns Hopkins University
The Leland Stanford Jr. University
University of Michigan
University of Pennsylvania
Princeton University
University of Wisconsin
Yale University

3. *Election of New Members.*—Other institutions may be admitted, at the annual conference, on the invitation of the Executive Committee, indorsed by a three-fourths vote of the members of the Association.

IV. MEETINGS

The Association shall hold an annual conference at such time and place as the Executive Committee may direct.

V. PROGRAM

The Executive Committee shall prepare a program for each meeting.

VI. OFFICERS

The officers of the Association shall be President, Vice-President, and Secretary.

These three, with two others elected by the Association, shall constitute the Executive Committee.

VII. VOTING POWER

In each conference, each university may have any number of representatives, but each university shall have a single vote.

VIII. LIMITATION OF POWERS

No act of the Association shall be held to control the policy or line of action of any institution belonging to it.

CALENDAR OF CONFERENCES

- FIRST ANNUAL CONFERENCE (organization),
Chicago, February 27, 28, 1900
- SECOND ANNUAL CONFERENCE,
Chicago, February 26-28, 1901
- THIRD ANNUAL CONFERENCE,
Chicago, February 25-27, 1902
- FOURTH ANNUAL CONFERENCE,
New York, December 29-31, 1902
- FIFTH ANNUAL CONFERENCE,
New Haven, February 18-20, 1904
- SIXTH ANNUAL CONFERENCE,
Baltimore, January 12-14, 1905
- SEVENTH ANNUAL CONFERENCE,
San Francisco, Berkeley, and Palo Alto,
March 14-17, 1906
- EIGHTH ANNUAL CONFERENCE,
Cambridge, November 23, 24, 1906
- NINTH ANNUAL CONFERENCE,
Ann Arbor, January 9, 10, 1908
- TENTH ANNUAL CONFERENCE,
Ithaca, January 7, 8, 1909
- ELEVENTH ANNUAL CONFERENCE,
Madison, January 4, 5, 1910
- TWELFTH ANNUAL CONFERENCE,
The University of Virginia, November 10-11, 1910

OFFICERS

1910-11

President—The representative of the University of Virginia.

Vice-President—The representative of the University of Illinois.

Secretary—The representative of Harvard University (to serve for a period of five years from 1908).

Additional members of the *Executive Committee*—The representative of Columbia University; the representative of University of Missouri.

THE TWELFTH ANNUAL CONFERENCE

FIRST DAY'S PROCEEDINGS

THURSDAY, NOVEMBER 10, 1910

At a meeting of the Executive Committee on Thursday, November 10, at 9:30 A.M., there were present:

For the University of Pennsylvania, *President*—Mr. Ames
For the University of Michigan, *Vice-President*—Mr. Reed
For Harvard University, *Secretary*—Mr. Little
For Columbia University, Mr. Carpenter

Resolved, To approve the Treasurer's report.

Resolved, To bring before the meeting the following recommendation:

That an invitation be extended to the United States Commissioner of Education to attend this meeting of the Association; and

To report that as yet no invitation has been received for next year's meeting.

MINUTES FIRST SESSION

The chairman, Mr. H. V. Ames, representing the University of Pennsylvania, called the Association to order at ten o'clock A.M.

The following delegates were present:

UNIVERSITY OF CALIFORNIA—Mr. David P. Barrows
CATHOLIC UNIVERSITY OF AMERICA—Mr. G. W. Bolling
THE UNIVERSITY OF CHICAGO—Mr. H. P. Judson, Mr. R. D. Salisbury
CLARK UNIVERSITY—Mr. E. C. Sanford
COLUMBIA UNIVERSITY—Mr. W. H. Carpenter, Mr. Calvin Thomas
CORNELL UNIVERSITY—Mr. E. G. Merritt, Mr. Frank Thilly
HARVARD UNIVERSITY—Mr. A. L. Lowell, Mr. C. H. Haskins, Mr. C. C. Little
UNIVERSITY OF ILLINOIS—Mr. Eugene Davenport
INDIANA UNIVERSITY—Mr. W. D. Bryan, Mr. H. A. Hoffman
STATE UNIVERSITY OF IOWA—Mr. G. E. MacLean, Mr. W. C. Wilcox, Mr. C. E. Seashore
JOHNS HOPKINS UNIVERSITY—Mr. Jos. Ames
UNIVERSITY OF KANSAS—Mr. H. K. Blackmar
UNIVERSITY OF MICHIGAN—Mr. J. O. Reed
UNIVERSITY OF MINNESOTA—Mr. J. F. Downey
UNIVERSITY OF MISSOURI—Mr. A. R. Hill
UNIVERSITY OF NEBRASKA—Mr. L. A. Sherman
UNIVERSITY OF PENNSYLVANIA—Mr. H. V. Ames, Mr. H. G. Fisher

The Association of American Universities

PRINCETON UNIVERSITY—Mr. Andrew West, Mr. E. G. Conklin

LELAND STANFORD JUNIOR UNIVERSITY—Mr. D. S. Jordan

UNIVERSITY OF WISCONSIN—Mr. C. R. Van Hise

YALE UNIVERSITY—Mr. F. S. Jones, Mr. R. H. Chittenden

UNIVERSITY OF VIRGINIA—Mr. E. A. Alderman, Mr. J. M. Page, Mr. W. M. Thornton, Mr. W. M. Lile, Mr. R. H. Dabney, Mr. R. H. Whitehead, Mr. A. H. Tuttle, Mr. C. W. Kent, Mr. R. H. Wilson, Mr. Thomas Fitzhugh, Mr. B. R. Payne, Mr. J. H. Kastle, Mr. W. H. Faulkner

The minutes of the last Conference were approved as printed.

The following recommendations and resolutions of the Executive Committee were read and adopted:

Resolved, That the Association of American Universities recommends to the United States Commissioner of Education the publication of an annual list of American doctoral dissertations.

The Executive Committee recommends that an invitation be extended to the United States Commissioner of Education to attend this meeting of the Association.

The Executive Committee reports that no invitation has been as yet received for next year's meeting.

The Committee on Aim and Scope reported that it had no recommendation to submit in regard to new members of the Association at this time.

The following Committees were appointed:

COMMITTEE ON NOMINATIONS: Mr. Haskins of Harvard, Mr. Kinley of the University of Illinois, and Mr. Merritt of Cornell.

To PREPARE REPORTS FOR THE PRESS: Mr. Dobie of the University of Virginia, and Mr. Little of Harvard.

The Treasurer's report was then read and approved.

RECEIPTS:

| | |
|------------------------------------|---------------|
| From assessments 1910-11 | \$380.00 |
| Interest | 13.69 |
| Balance | <u>867.11</u> |
| | \$1,760.80 |

EXPENDITURES:

| | |
|---|-------------------|
| For reporting Eleventh Conference | \$ 32.50 |
| For printing proceedings, Eleventh Conference | 284.28 |
| For reprinting and mailing proceedings of first six Conferences | 923.93 |
| For distributing journals and reprints | 31.57 |
| For expenses of Executive Committee (traveling) | 28.00 |
| For printing programs, Twelfth Conference | 22.00 |
| For telegrams, postage, express, and sundries | 21.51 |
| | <u>\$1,343.79</u> |
| | <u>\$1,343.79</u> |
| Balance on hand November 8, 1910 | \$417.01 |

Mr. Bryan on behalf of Indiana University presented a paper on "Combined Courses in Academic and Professional Work."

The paper was briefly discussed by: Mr. Lowell, pp. 25, 26, 29, 31; Mr. Bryan, p. 26; Mr. Jordan, pp. 26, 28, 29; Mr. Haskins, p. 26; Mr. Conklin, pp. 27, 31; Mr. West, p. 28; Mr. Barrows, p. 28; Mr. Page, p. 28; Mr. Wilcox, pp. 29, 31, 33; Mr. Chittenden, pp. 29, 30; Mr. Carpenter, p. 29; A Delegate, p. 30; Mr. Judson, p. 32; Mr. Dabney, p. 32; Mr. Reed, p. 33.



THE ASSOCIATION OF AMERICAN UNIVERSITIES

PAPERS AND DISCUSSIONS DURING THE TWELFTH ANNUAL CONFERENCE

FIRST SESSION

COMBINED COURSES IN ACADEMIC AND PROFESSIONAL WORK

PAPER PRESENTED IN BEHALF OF INDIANA UNIVERSITY BY MR. BRYAN

The so-called combined courses and related questions have been discussed several times in this Association, especially in the Ninth and Tenth conferences. In view of these and other important discussions of the subject already at hand, your committee has decided that its most useful contribution would be a summary presentation of existing practices and opinions, with the final intention of determining in how far an agreement can now be reached.

This report accordingly includes the following parts:

1. The rules concerning the combined courses in law and medicine announced by the universities belonging to this Association offering such courses.
 2. Opinions of about one hundred men from the faculties of something more than fifty colleges and universities within and without this Association.
 3. A partial bibliography of the subject, including notes on some of the more important discussions.
 4. A summary discussion of the subject.
 5. Resolutions intended to determine in how far points of agreement have been reached.
- Parts 1, 2, and 3 are printed and in your hands.
Parts 4 and 5 follow.

I. The combined arts-professional courses are to be judged in comparison with other courses now offered in standard colleges of liberal arts.

The salient characteristic of our American school program as a whole is its extraordinary breadth. The range of work offered in all our schools a hundred years ago was very narrow. It was possible for one to take all that was then offered in the elementary school, academy, and college, and to master, up to a certain level, the few subjects with which an educated man was expected to have acquaintance.

In contrast with that situation, we have now for young people of every age a program of studies so wide that no one can by any possibility master it. We attempt to make the school at every level represent the whole of civilization. In the elementary school,

besides the traditional reading, writing, and arithmetic, we offer grammar, geography, physiology, history, civics, and often also drawing, music, manual training, sewing, cooking, German, Latin, algebra, stenography, typewriting, agriculture, and ethics. As a rule we do not in any of these subjects select essentials for mastery, but crowd every course with detail, and we try to have every child take as much of the entire program as possible.

In the high school we repeat upon a higher level the program of the elementary school. On this level the program of sciences, languages, mathematics, history, manual training, stenography, typewriting, et cetera, has grown so wide that no one can go through the form of taking it all. We offer, therefore, a choice of several courses, each full of detail and variety, and with difficulty crowded into four years.

In the college we repeat for the third time the effort of the lower schools to represent civilization in its entire range of achievements and interests. All of the chief departments of learning demand time, not simply for a general introduction, but time for the initiation of men in some such thoroughgoing fashion as the men of a hundred years ago were initiated into the Latin. The colleges have acceded to these demands to such an extent that a student might spend forty years in one of them without finding time for all the work offered to an undergraduate.

The colleges have met this situation by a variety of expedients. In the course of the last century, when the increasing range of college subjects could no longer be included in one four-year course, the colleges arranged two four-year courses, and then three, or possibly more. Furthermore each four-year course was made to include brief introductory courses in many subjects, instead of permitting and encouraging the mastery of one subject as the early nineteenth-century curriculum had done. However, the mid-nineteenth-century device of two or three very broad courses, each planned so as to give a brief introduction to many subjects, broke down in its turn before the increasing throng of new subjects. The college faculties confronted a problem which they did not know how to solve. They would not, and could not, shut the new subject out. They could not, in the outset, organize those into rational college courses. In some cases the problem was given up; the old curriculum was allowed to explode; and all the four classes were invited to elect their way among the fragments. In a greater number of cases the colleges have felt their way to some such prescription as the following:

1. A small number of Freshman-Sophomore programs, each providing and requiring work of elementary collegiate grade in a few fundamental subjects.
2. A large number of Junior-Senior programs, each having as its central feature a major subject, or a prescribed group of subjects. The essential feature of a major, or of a group, is that, in the opinion of the scholars most competent to judge, it shall furnish a substantial introduction to some great department of learning. The adequate major, or group, is for each undergraduate the backbone of his college course, doing for him something like that which the Latin was expected to do for every undergraduate a hundred years ago.

Whatever one may think of these prescriptions for a college course, they are the best which our colleges have been able so far to formulate. Nearly all standard colleges whether independent institutions or those connected with universities, have adopted essentially the program described.

If now we examine the courses offered in our colleges, we come upon the fact that many of them are, in point of fact, arts-professional courses. An arts-professional course is one which offers, in the outset, a general introduction to a professional field through a study of the underlying subjects, and which then offers also special advanced courses, planned for, and usually taken by, those who are to be for life professional students in that field. The combined courses in law, medicine, and engineering are examples, but there are many others. In a dozen departments represented in the colleges, a principal aim, when not the principal aim of the professor, is to bring forth specialists after his kind. If a certain undergraduate course in bacteriology is professional work for one who is to be a physician, the same course is in the same sense professional work for his comrade who is to be a specialist in bacteriology. If a course in Senior mathematics is professional work for the future engineer, the same course is professional work for the future occupant of that chair in mathematics. College work is for a given student professional when it is the work which prepares him specifically for the profession in which he is to spend his life. The Junior-Senior programs of the colleges are full of such work, planned for, and taken by, men in specific preparation for one or another learned profession. If they are right who believe that a student should postpone until the completion of his college course those studies which provide specific preparation for his life work, and should devote his college course to studies which lie quite outside his future profession, or which at most furnish a general basis for it, existing college programs must be revolutionized. The revolutionists will have a comparatively easy task in eliminating from the college professional work leading to law, medicine, and engineering. They will have a great and almost hopeless battle with the professors in the colleges whose chief interest is not in a generalized college course, but in their several majors.

The combined courses in law, medicine, and engineering are nothing but standard groups, identical in every essential quality with a dozen other groups, or majors, established in the colleges. For illustration, consider an example from Princeton University, chosen because of the notable care taken by the Princeton faculty to preserve the best qualities of the older college course. If we err in any detail of this citation, it will be remembered that no one is safe from going astray in a strange college catalogue.

Princeton College narrowly prescribes the work of Freshmen, offers a wider range to Sophomores, and a still wider range to upper classmen, but in such a manner that the later choices presuppose certain specified earlier courses. Accordingly, whatever choices the Princeton undergraduate makes, he has a course which has been planned in advance in most of its details by the faculty. Each undergraduate course of four years requires,

on the one hand, the study of certain fundamental subjects, and, on the other hand, the pursuit of what may be called a major, or group, such as mathematics, modern languages, or the like. Thus Princeton has sought to deal with the wide range of college subjects in such a way as to insure for each student breadth and, at the same time, depth of training. If now we turn to the announcements of the department of civil engineering at Princeton for 1910, we read:

The course in civil engineering is designed to fit its graduates for entering the profession of civil engineering. The degree conferred at its close on successful candidates is Civil Engineer (C.E.). The regular course of study occupies four years, but applicants who are found to be suitably prepared are admitted to advanced standing. Bachelors of Arts, of Letters, or of Science of Princeton University, who, while undergraduates, have pursued suitable elective studies, can ordinarily be prepared for the civil engineer's degree by a two-years' course in the technical studies required for that degree (*Princeton University Catalogue*, 1909-10, p. 114).

This is the arts-professional combined course. Princeton here disregards the criticism that two degrees, each demanding a four-year course, should not be given in less than eight years. Upon this point Princeton conforms to the best European and American practice, according to which the granting of two degrees means simply that the conditions for both have been fulfilled, and not that the work done for the one degree is wholly distinct from that done for the other. Princeton stands for the general educational value of the four-year undergraduate course, in which mathematics is emphasized as justifying its A.B., and it stands for the professional value of two of these years by allowing them to count toward its C.E. The best combined courses in law and medicine offer precisely the same justification.

II. The various types of combined course are attempts to hit the difficult mean between too early and too late entrance upon professional studies. There is substantial danger in both directions. Let us briefly recall these opposite dangers.

On the one hand, too early entrance upon one's life work tends to develop early efficiency at the cost of final efficiency. Compare the bootblack, who is earning his living at ten, with the schoolboy, who, at ten, has earned nothing; or, the apprentice of sixteen, who has spent two years at a trade, with the high school graduate, who is not skilled in any form of labor; or, the freight office clerk of twenty, who has had four years in an office, with the college graduate, who, at twenty, is completing fourteen or fifteen years of continuous schooling; or, the practical engineer of twenty-five, who has picked up a working knowledge of his profession in the field, with the graduate in engineering, who is well schooled in mathematics, physics, chemistry, and mechanics, as well as in technical engineering, but who has never yet held a job.

In each of these cases the one who has saved time by not going to school seems to be, and is, in certain ways, far in advance. He has become adroit, shrewd, wise within the limits of his daily work, practically efficient. His comrade, who has gone to school, exhibits marked inferiorities. His knowledge is more remote from actual affairs; his

practical judgment more undeveloped; his immediate efficiency relatively insignificant. Nevertheless the one who has gone to school has two capital advantages. One of these is his school experience with its inevitably emancipating values even when much of its detail is forgotten. The other advantage is precisely that he is not yet so adroit, not yet so practiced in vocational routines, not yet so far gone from the invaluable plasticity of youth into the vocational habits from which there is no escape. In a word, *the boy who has gone to school is not so old* in terms of physiological and mental habit as his comrade of the same age who has gone to work and retains, therefore, the possibility of those subtler forms of growth which make for leadership.

The defense for going to school at all, in any grade, is that it is worth its cost in money, time, labor, and immediate efficiency, because in the long run it brings more and higher kinds of efficiency besides still other and higher values. The defense for going to school for many years, through the elementary and high school, through the colleges and professional school, is that this great price is not too much to pay for the development of fit leaders. Professor James has described the leader of our desire—the man who knows another good man when he sees him; who knows the first-rate from the second-rate within and beyond his own profession; who discovers to his neighbors the men and standards most worthy of their admiration, and who so becomes the medium through whom his neighbors find their way to the higher good in every form. It is, happily, not simply a few enlightened ones who believe this. The people believe it. They know the illusion of the short cut. They know the justification for the longer way. They prove their faith in the longer and higher education by their sacrifices for it. If a program of general and professional studies can be planned, however long and expensive, which proves justifiable on the highest level, the people will support that program.

We have dwelt at length upon the dangers of beginning professional studies too soon. The opposite danger must not be forgotten. Going to school is not the chief business of a man. Going to school too long may injure one as much as leaving it too soon. There is very general recognition of this fact, and very general belief that the total time required in the United States for the elementary school, high school, college, and professional school is longer than it ought to be. We require twelve years below the college. This requirement is criticized, is declared to involve two or three years of waste, but meanwhile is becoming always more solidly established in practice and in law. In the extreme case, we follow this by four years of college work selected so as to include any studies which shall shorten the professional course, and we follow this by four years of professional training, which, in the case of medicine, proves to be not time enough.

The sixteen-year program of general studies preceding the professional school is criticized not simply because it is too long. General studies, even when good, have the disadvantage which goes with their merit. They make for breadth, not for mastery. Too long continued, they tend to develop the amateur.

There is a worse possibility. The worst thing in the colleges is not precocious professionalism and not the development of dilettanti. The worst disease attacking the colleges is the fashion of idleness. There is something for laughter, but also for indignation and alarm, in the spectacle of a faculty of eminent scholars standing baffled before some hundreds of young men who have the settled belief that college life is nothing but a holiday. Now there are many who believe that this disease of the colleges—said to be much worse in the East than in the West—is due in no small measure to the long continuance of general studies. It is certain, at any rate, that nothing does so much to save the good student from becoming a dilettante, and to keep the idle student from going to ruin, as the lure of a great vocation. There is an ancient tradition still surviving, and reflected in some of the opinions quoted in this report, that the occupations in which men work for a living are somehow ignoble. But in truth it is within the great historic occupations that mankind has spent the most and the best of its energy, and has made and has treasured the inventions which taken together constitute civilization. The great historic guilds of lawyers, physicians, architects, scholars, priests, poets, and the like have given to the schools all that the schools have to teach. The great occupations are in every generation the real teachers within and beyond the schools. Their appeal to the youth is radical. For his deepest instincts and necessities are identical with those out of which those occupations grew. The passions which make a boy a prodigal are not so strong as those which entice him to take up the tasks of his ancestors. So when a college boy, still, as when a child, an insatiable lover of holidays, feels the deep call of his blood for work befitting a man, that is the day of his conversion. He now confronts in a new spirit a new sort of school program. He finds a system of tasks severely chosen and organized from the standpoint of a great profession. There is a minimum of waste. Things are not taken up to be touched and abandoned. The first things are really elementary in the sense that they are carried forward as elements in later and larger knowledge. What he learns today is an alphabet with which next year he will read. He is not simply learning to make a living. He is doing what the amateur never does. He is approaching mastery of a great and coherent system of knowledge and this is to approach possession of an educated mind. The most fundamental education of a man comes not outside but inside the occupation to which he devotes his life.

III. We have sought to state truly the issues between general and professional education. In our judgment the American college has not yet fully found its course of study. The task of digesting the enormous range of new subjects is incomplete, though indeed less so in the college than in the elementary and high schools where we have at all levels programs of incoherent breadth. The major subject and group systems in one or another form represent the best experiment we have been able so far to make. The combined arts-professional course is an integral part of that experiment. In our judgment this program is justified, if safeguarded along such lines as the following:

- i. Every college course leading to the Bachelor's degree should be guarded against

excessive specialization whether in a major or in a professional group. When the faculty is lax upon this point, a professor in any department and his special students may arrange to use a very large part of the college course within that department and its immediate collaterals. They may thus do in the undergraduate course what should be done in the graduate school, with the surprising result that the youth who expects to be a college professor has himself scarcely any general college education. Or a professional group may be so arranged as to use the last two years of the college course in strictly professional work, and nearly all the first two years in quasi-professional work. It may be asked, for example, that the classes for premedical students in French and German shall spend as little time as possible upon pronunciation, grammar, composition, or general literature, so that all haste may be made toward ability to read the professional literature. In this case the college course becomes completely professional. The faculty of the college which confers the Bachelor's degree is not required to tolerate these extremes, whether in a professional group or in a major. The example quoted from Princeton shows that such extremes may be avoided and a college course of substantial breadth maintained even where the college course and the professional course are given in a total time of six years.

2. If professional work is given by, or accepted by, the college, it should look toward mastery of underlying sciences and only incidentally toward their professional application. The range of attainments desirable for a professional student, including mastery of the underlying pure sciences, and then of the appropriate applied sciences, and then of the many delicate tools, devices, and methods necessary in practice, is so great that something must be selected for emphasis. Very naturally our professional schools make different choices, one emphasizing practical training to the neglect of science, and one dwelling upon scientific foundations and deferring somewhat the details of practice. In general, if a student follows a program which is decidedly of the first type, he is the more ready to go to work when he graduates. If he follows a program which is decidedly of the second type, he is less ready to practice his profession when he graduates, but in later years he should be the better able to meet the larger problems of his profession, not with rules of thumb, but with resources adequate for their mastery. If the colleges believe in this more fundamental and prolonged professional training, they can develop it by making the first two years of the professional courses primarily scientific. They may do this in two ways: First, by allowing advanced work in the underlying pure sciences to count as professional work; Second, by seeing to it that all the work of the first two years in the professional school is done by men who are primarily scholars rather than practitioners.

3. The question as to how much time should be given to the academic and professional course combined is one upon which most of us differ by only one year. Very few would demand more than seven years. Very few would demand less than six years for the two where the professional course requires four years, as in medicine and engineer-

ing. We approve the seven-year combined course, and do so all the more because it falls in line with the practice of certain universities and colleges by which a professional student may complete his college course in three years.

4. We disapprove any law or rule whose effect is to deny credit to elementary professional work done in standard colleges not connected with universities when the same work done in the university colleges receives credit. If justice is done in this respect, the independent colleges will have no ground for objection and will make no objection to the combined arts-professional course, for most of these colleges already offer various majors, or groups, which have every essential character of the combined arts-professional course. We earnestly hope that this Association will use its great influence in favor of just laws and rules in this essential matter.

In order to determine in how far members of this Association have reached a consensus of opinion upon the questions under consideration, we submit the following resolutions:

1. *The duration of the collegiate and professional courses.*—The Association approves the view that it should be possible for students to complete the requirements for graduation in a standard college of arts and sciences and in a professional school in seven years when the professional course requires four years, and in six years when the professional course requires three years.

2. *Work which is at once collegiate and professional.*—The Association recognizes as a fact that a considerable amount of work properly offered (in some cases necessarily offered) to undergraduates in the college of liberal arts and sciences is also professional because it is directly preparatory for a learned profession such as teaching, research, medicine, law, engineering, or the like.

3. *Work counted on two degrees.*—The Association approves the well sanctioned custom of granting two degrees to an individual, when he has completed the requirements for both, without requiring work done for the one degree entirely distinct from that done for the other.

4. *Against extreme specialization in the college.*—The Association disapproves the use of a large proportion of a college course in the interest of any specialty or profession. The faculty of the college of arts and sciences should fix the limits of permissible specialization, and this should be done so as to assure due breadth of collegiate instruction for all who receive the college degree.

5. *Character of the arts-professional work.*—Professional work done or accepted by the college of arts and sciences should be of fundamental scholarly quality. The primary aim of this work should be to develop mastery of fundamental principles, training toward specific professional application being secondary and incidental. The professors who give this work should be primarily scholars rather than practitioners.

6. *The form of the Bachelor's degree.*—The multiplicity of courses in standard colleges leading to the Bachelor's degree makes it impossible to offer a distinctive degree for each, and makes it, therefore, unimportant to continue the use of any degree for the undergraduate college except A.B.

7. No discrimination against the colleges which are not connected with universities.—The Association disapproves any discrimination against the standard colleges not connected with universities in favor of the colleges which are so connected. If work done in a college of the one type is credited toward two degrees, corresponding work done in a standard college of the other type should receive the same recognition. The Association disapproves of laws or rules from any source whose purpose or effect is to make this unjustifiable discrimination.

MR. LOWELL: Mr. Chairman, I would like to ask whether the first resolution is intended to mean that all universities ought to establish the seven-year course, that every university ought to adopt the combined degree, or whether it means it is the proper thing to adopt for those who advocate its adoption. In other words, are you standardizing the degree, or trying to standardize it? That is not a matter of slight importance; it is a matter of a great deal of importance. For myself, I think this movement is really not an attempt to lower education, but to raise it. We have a habit in America, if we get a good brand in anything, of trying to furnish it a little cheaper and just as good. Consequently, the A.B. degree, which is most prized by the community at large, we try to furnish a little cheaper. What I want to ask is this question: Is it intended that all colleges that confer any professional degree should reduce their purely non-professional work preceding the professional course to two years, because I think that would be little short of a calamity.

Mr. Bryan argued very well that the college course should not be too short, and then on the other hand he argued that it should not be too long. His first argument convinced me that it should be as long as possible, and his second that it should be as short as possible. My idea is that the time varies with different men and in different parts of the country. I am assuming what Mr. Bryan assumed, that there is a pretty sharp cleavage between the professional and non-professional work. If we insist that everybody who studies medicine or law must take four years of non-professional work, we will cut out the professions from a great many men who want to enter them, we will cut them out for probably the majority of men. If a man can afford to do it, it is wise to take four years of non-professional work before he begins his professional career, but not all can afford it. I do not mean afford it in money, I mean afford it in ambition and in toughness of character. Numbers of men who take this four-year course before they enter upon their professional course have to earn their daily bread while they do it. I believe those men will attain to higher positions in their professions, and I believe in twenty years after leaving college they will reap the benefit.

Is the resolution intended to be a recommendation to all colleges that they should offer a degree in such form as will encourage students to take only two years of non-professional work before they begin their professional work? If it is, it seems to me unfortunate. On the other hand, it is a good thing if those universities who feel that their field lies there are allowed to encourage a man to take only two years of non-professional work before he begins his professional work, but leaving to those universities who think their mission lies in that direction to encourage men who are so moved to take four years of non-professional work before they begin their professional course. You cannot practically combine those two things. You cannot practically say to a man that you will give him an A.B. degree if he will take two years of non-professional work, or that you will give it to him if he takes four, as that is a practical intimation to the student of a university that two years is as good as four.

I wanted to ask this question, because I think it is important. I doubt whether one-third of the members here have read this pamphlet. We know that people, unless they are forced to do so, do not read printed pamphlets, and college presidents are no exception to the rule. A discussion of this matter will cause many of us to read it.

MR. BRYAN: Mr. Chairman, I intended in the first resolution to state the point upon which I think we come nearest to having an actual consensus of opinion, that is to say that it shall be possible for a student to secure the Bachelor's degree and a professional degree in seven years instead of eight.

MR. LOWELL: What I am asking is, Do you mean that this Association shall recommend to all colleges that that, and only that, shall be possible everywhere? Do you mean that this Association should recommend that every institution should grant those degrees in seven years, and no more and no less? That is, I do not mean that the student should not spend the next year in non-professional work, but do you mean that the degrees of A.B. and B.L. should be open after six years to a student in every institution in this country, and not open in any institution in less than six years, or do you mean that this is a very proper thing to do and not to imply that it is not proper for any institution to depart from it and make it less or more?

MR. BRYAN: I did not mean to recommend that students should not be permitted to take eight years, but, against the position that the students must have spent four years in the college of liberal arts and then four years in the professional school. We mean to recommend that it should be possible for a student to take the work of the college of liberal arts and of the professional school in seven years.

MR. LOWELL: Possible where?

MR. BRYAN: In a standard college or standard university.

MR. LOWELL: That means every institution belonging to this Association?

MR. BRYAN: Yes.

MR. LOWELL: You mean that it should not be possible to take it in less than seven years anywhere, and it should be possible everywhere?

MR. BRYAN: Yes.

MR. JORDAN: While many of us favor six years in medicine, I would say this resolution is a criticism on Harvard University, because a good student can take his A.B. and his professional degree in seven years at Harvard, is that true?

MR. LOWELL: That is true, but certain institutions are counting double. We do not count double.

MR. HASKINS: Mr. Chairman, I would like to protest against one incidental statement, and that is that double counting is in accordance with the best European and American systems. The system of double counting in Europe is entirely different from the American. A European degree is not based on a certain number of years, it is based on the student reaching a certain standard, and that is reckoned by taking a percentage of the attendance and partly by examination. Anything the student knows beforehand is so much to his credit, if he knows more than is necessary before he comes in, but the time is not shortened as in the artificial system of count-

ing twice, but is determined by the attainment of a certain standard. We do that thing now in admission to our colleges; we go on the principle that most men do not know much, and if a man knows more we are very glad of it, but we do not shorten his time by counting that twice. If we put the degree upon the same basis as the examining colleges put admission to college, as the examining boards of law and medicine do in the states now, the basis of the reaching of a certain standard of attainment, an examination that will require knowing something rather than studying a certain number of years, would not that solve a great many of these questions?

One other point. I notice that law and medicine are always paralleled in these discussions nowadays. A certain fundamental knowledge of science and of manipulation is highly desirable, probably necessary, before a man begins to study medicine, but nothing like that is needed in the study of the profession of law. They cannot be paralleled. The combined course in law allows a certain amount of general education, while the medical course allows very little. The propositions are very different ones.

MR. CONKLIN: Mr. Chairman, it seems to me that one thing which we have to bear in mind is the fact that the professional courses which require these preparatory courses should be represented in such a discussion as this if it is to have very great weight. Most of us are men who are engaged in the colleges of liberal arts, or men who are engaged in non-professional work. I am quite sure that if we had a sprinkling of medical men, or men engaged in teaching law, we might have a very different discussion. Personally I have a feeling that, so far as the work preparatory to the study of medicine is concerned, it is work for the liberal arts course. Chemistry taught as chemistry, or biology taught as biology, has a proper place in any college course of liberal study, and is proper work for that course as medical men now recognize. If any of that work is done in medical schools, that work is so far a liberal study, and belongs properly in the college course. I really think there is a good deal of overlapping of that sort. The first year of medicine in most medical schools is not all practically pure science. Biology taught as biology, as a science in itself, without particular regard to its applications, is a liberal study, and the same is true of chemistry. In my opinion, the sooner the medical schools get rid of medical chemistry and medical biology, the better it will be for the profession. There should be no requirement that a man must repeat his chemistry because he did not take it in a medical school. That is certainly a ruinous sort of requirement, though it is a requirement now followed by many colleges throughout the United States. Colleges which give a good course in chemistry send their graduates to medical schools where they are required to repeat a poor course in chemistry because they have not taken their good course in a medical school, and the same thing applies to courses in biology and physiology. If a man has attained a certain standard with regard to those studies, in all conscience he should not be required to go over the same ground and do work that he has done satisfactorily before. There should be, it seems to me, on the part of some of our professional schools, a more liberal spirit with regard to work that is really work not of pure science but of liberal study; and if we could have some conferences with men who represent the professional schools in medicine, I think we could perhaps reach an understanding and arrive at a procedure which would meet the approval of all universities. At the present time, it is quite unfair, as pointed out by many of the smaller colleges, that the work they do satisfactorily in such subjects as chemistry should not be accepted,

whereas the work done in larger institutions which have professional schools is accepted. Of course there is danger always that the work done in the smaller schools may not be well done, but, by examination, that could be tested, and if it were found by examination that the work was well done, it seems to me that that work ought not to be required a second time of the man who has performed it satisfactorily once.

MR. WEST: Mr. Chairman, there is one other point upon which I would like to speak for a moment. It seems to me that the length of the college course is one question, while its relation to the professional course is quite a distinct question. Boys can go from the high school directly into a professional school without any college course at all, or they can go from the Freshman year or the Sophomore year in college to the professional school. If that is recognized as the prevailing fact, what is the trouble? Why should not students go to college, if they can stay as long as they wish, get as much good as they can, leave when they get the most or the best from them and go to the professional schools, if that is once recognized? Furthermore, it is recognized that one class of work calls for one class of degree, and another class of work calls for another class of degree, and a double degree for single work necessarily leads to misrepresentation of what is going on, because of the misuse of the label. It ought not to be forgotten that the large majority of college students are not going to professional schools, and the question of whether it is necessary to have a college course concerns them as well.

MR. JORDAN: Mr. Chairman, I object to the phrase double counting. It is not a question of any kind of cheating or double counting, except that we have agreed to make the college course four years long and the medical course four years long, but inasmuch as some of the subjects in the college course are repeated in the medical course, we allow the work already done in the college course to count for the medical course. We would not think for a moment of admitting an A.B. that had not had two years in chemistry and two years in physics to our medical course. Law and medicine stand upon a very different ground; engineering and medicine stand upon very much the same ground, that is, each one requires a certain amount of preliminary work, while in law we have not reached any agreement as to any preliminary work.

MR. BARROWS: Mr. Chairman, I think I can state that the practice of the University of California conforms pretty closely to President Bryan's recommendation. For some years the University of California has followed the practice of recognizing a distinction between the first two years of the college course, when the student is held to a pretty rigid course, and the Junior and Senior years, when he may, by his choice of a major subject, begin his preparation for law or other professional training, and during his Senior year he may take a good deal of his professional training, and then, in two years more, take his law degree, or his medical degree in three years of further training. It is simply a matter of the choice of the major work during his last two years or last year of the college course.

MR. PAGE: Mr. Chairman, as far as the practice of the University of Virginia is concerned, we conform already to the representations in section one of the report as regards medicine and law, but we have the same difficulty with regard to engineering as I understand from Mr. Bryan's paper. That is to say, the student who offers for the Bachelor of Arts degree may very easily arrange his courses in such manner that, after receiving that degree, he can get the degree in engineering in two additional years. It seems to me that there is where the

main difficulty is going to come up, if we try to conform to this resolution in all respects, that is to say, I think we can all agree easily on a seven-years' combined course for B.A. and M.D., and a six-years' requirement for B.A. and Law, but it is difficult to say what we are going to do about engineering. It would be a very difficult matter, I think, especially in the case of a university located as far south as this one is, to arrange the engineering course in such a manner as that students offering for the B.A. degree cannot afterward get the engineering degree in two years. I will watch with great interest whatever conclusions the Association comes to in regard to the combined degree of engineering and arts. I think the other two are practically settled now.

MR. WILCOX: Mr. Chairman, I would like to ask a question, primarily for information. Would not a man who had the degree of B.A. at one of the leading universities, say Harvard, Yale, or Columbia, for example, be matriculated in the department of medicine on the presentation of his diploma?

MR. JORDAN: He cannot with us until he has had two years.

MR. CHITTENDEN: Mr. Chairman, I merely want to emphasize, if I may, a subject which has been already referred to once or twice and which I think is of primary importance. It seems to me that we must not forget that there is no parallelism between medicine and law. Mr. Jordan referred to it several times. I think that we must recognize that a man going into medicine must have had preliminary general training in chemistry, biology, and so on. It is not a question of three, four, or five years, it is a question of whether the man has had the necessary training in biology and chemistry, and when I say biology, I mean not simply zoölogy, but I mean what the word implies—the study of the living organism. It seems to me that we must keep that point in mind. Medicine requires one thing in the line of preparation, and law requires perhaps its own preliminary work, but we cannot combine the two and make a rule which will fit the two cases.

MR. CARPENTER: I would like to ask the gentleman who has just spoken, what, in his opinion, would be the preliminary requirements of law?

MR. CHITTENDEN: Mr. Chairman, I do not think I am at all competent to answer that.

MR. LOWELL: Mr. Chairman, I do not suppose that any of us feel that we have worked out all the problems of education yet, but I cannot help thinking there is some superstition about this, and I think it comes from this: law is the oldest of all the professions that we are speaking of, medicine is the next oldest, and engineering is one which we are just now making into a learned profession. Now I am not sure that has not something to do with the feeling that we have of the amount of special knowledge required for entering into them. I have been trying to get up some statistics with regard to the facts as shown by the use for thirty years or more of the elective system at Harvard, and the results for thirty years are rather illuminating. I think we can assume that in all professional schools, proficiency in that school is a pretty good indication of those studies with which it is best to begin. I have taken the law school for thirty years. I have taken the men who have taken six or more courses in natural science, economics and government, mathematics and philosophy, and I cannot find any considerable difference in the standing of the men in the law school according to the groups they

selected, except that the men who took mathematics were better, they got *cum laude* much oftener. Of course any one who selects mathematics has a strong intellect and a strong digestion. I tried the same thing in the medical school, and carried it back sixteen years, and here is a striking fact—the number of men who took literature and natural science was very large, and the number of men who took philosophy and mathematics was very small, and all did about equally well. I took those who had had less than three courses in college and they averaged a little better than the rest, only a trifle, but then I admit the numbers were not very large. This covers an experience of sixteen years, which is worth something. I took those with ten courses, and they did a little less work, which means that the men who took ten courses simply followed the line of least resistance, while the men who took only three courses were men of some originality, men of some force. But it does show that the amount of science necessary for going into the medical school is very slight, and probably we have exaggerated the amount that is necessary. The men who took ten courses in science did better than the men who took six, and the men who took six did better than the men who took three, in the first year, but when you get to four years you find the difference. It does look to me, therefore, as if both in the medical and the law school we pay too much attention to the preparation in that particular subject. In other words, it makes vastly more difference how well a man works in college than what he has taken. We talk a great deal about the minimum, we talk a great deal about requiring this and that and the other course. Let us throw the emphasis a little more on making men think that it makes a difference how well they do in college, and I think our questions will very largely solve themselves. In other words, if we can make the men think in college that the college work they do will tell for them all through life, we need not worry ourselves about prescribing the courses that they should take. It is very easy to persuade them to take prescribed courses; the difficulty is rather to persuade them not to take too much. I mention this because I think there is some superstition that medicine requires great preparation in science, while I think it is better to lay emphasis on the quality of the work done in college.

A DELEGATE: Mr. Chairman, I would even go so far as to say that a student who is going to undertake medicine ought to give a large part of his college work to other things than medicine, because, if he does not do so during his college course, he will probably never do it, and he should get his science some time. Before a student enters into a medical school and studies such subjects as bacteriology, etc., which are recognized as parts of medical science, he should know the sciences on which they are based.

MR. CHITTENDEN: I should like to relate an incident. I understand that statistics are frequently misleading, but I recall that nearly twenty-five years ago when biological courses were very much less given than they are now, I happened to know of a group of men who had had the biological course in a particular college which gave a thorough general training in chemistry and physics. The curious fact is this, that the man who took the highest prize at college in Columbia was a graduate of this course in biology. The first seven out of ten men were graduates of that course. The man who took the *Ballston* prize at Harvard was a member of that course, and the man who took the five hundred dollar prize at Bellevue. I wondered why it was. It has always advocated, to my mind, this principle, that a general biological

training is a benefit to a man going into medicine; I do not mean specialized biology, or specialized chemistry, but a training that fits a man to understand functions in the normal will help him with them in the abnormal.

MR. CONKLIN: Mr. Chairman, I have heard not infrequently during the past year of the advice being given to college students not to study biology before they went into the medical school, because they would have four years of it in the medical school. The man who undertakes to study medicine without a fundamental knowledge of biology is in practically the same position as a man who would undertake to study the moon without any knowledge of astronomy. He must have a knowledge of the fundamental science upon which medicine is based.

I would like to refer to one remark made by President Van Hise. The college course is not long enough really to provide training in all of the liberal subjects. About ten times as many courses are offered in the best colleges as can possibly be taken in four full years of college work. Therefore, to expect a very full training in one line would be quite out of the question, and naturally we must be content with some sort of a compromise. Now I believe that the first two years of the college course ought to be very liberal and very broad, but I also believe that scientific studies are liberal and broadening, as much so as those which belonged to the old trivium or quadrivium. But there is not time in the college course for one to take liberal studies up to the Senior year, and then, in one year's time, take subjects which are preparatory to medicine in the proper sense of that word, studies which are fundamental to any further training in medical science. The student must begin earlier than the Senior year if he is to do that.

MR. WILCOX: Mr. Chairman, there is one phase of this subject which has interested me somewhat in the last year or two. As I understand it, the National Association of Medical Colleges, or whatever the name of it is, has adopted a resolution that goes into effect this fall, that students matriculating in medical colleges which are members of that Association must have had two years of college work. I believe I am right in that. As I understand it, so far this National Association of Medical Colleges has not prescribed what those two years should be, at least, if it has, it has done so tentatively; but I am told that the National Association of Medical Colleges intends very soon to determine what the two years of college work shall be, and they are to be along biological and chemical and physical lines. Might we go on just one step farther? Let the National Association of Medical Colleges establish three years of college work before matriculation in medicine, and then prescribe in all three years what the courses shall be, and we who are connected with colleges of liberal arts will be brought to the very absurd position of having to give the B.A. degree to men who are taking the prescribed medical course, three years of which is supposed to be handled by specified members of our faculties of liberal arts, and we will be giving the B.A. degree to men who are having seven years' training in medicine. We are getting to about the same thing in law, though the conditions there are not so bad.

MR. LOWELL: Isn't there one further point? Are we not misled by this policy? Biology is a liberal subject, it would be a liberal study for a lawyer. One of the curious facts I find in going over these figures is that lawyers take so little natural science. But the man going into medicine, does it give him that different point of view which he ought to have? It

is very broadening for a young American to go to Florence, but does it follow that it is broadening for a young Florentine to stay in Florence?

MR. JUDSON: Mr. Chairman, the liberal quality of any study does not depend primarily on the content at all, but rather on the purview and the purpose for which it is taken. If a lawyer takes biology, that has a broadening value. It is not the content of the subject at all, but rather it is the purpose and its possible connection with other things.

I cannot think that the so-called matter of double counting for degrees is a matter of any importance one way or the other. It is simply a matter of adjusting things in institutions which give two kinds of training. The question is, what, on the average, is the least amount of time that should be devoted, and if that is, on the whole, after leaving the high school, six years, or seven years, well and good. Mr. Haskins struck the right note when he said that it was much more a question of the student reaching a certain standard of attainment than a question of time. We have not found out in any of our colleges or universities the right way for testing a man's efficiency. We cannot put much confidence in years, or quarters, or semesters, just as if we were paying off a bill in a dry-goods store, and we have no way to find out whether a man has power in any way. If anyone here can point out a practical way of doing that, he will make, to my mind, the greatest contribution to the cause of education that has been made in the last generation. The question is not only how much time a man ought to spend to fit himself for a professional degree, but also how can we find out how much power he has.

MR. DABNEY: Mr. Chairman, I was much struck by what President Lowell said about the advantage of the young American going to Florence, and the disadvantage to the young Florentine from staying there all his life. That put in my mind the reason why I voted, some years ago, for the resolution which substantially adopted this system recommended by Mr. Bryan's committee, that is, permitting one year of professional work to be counted for the B.A. degree. The main reason why I voted for it was this—I wanted to induce young men who were going straight from the high school into the professional courses to take some academic work. In other words, I wanted more young Americans to go to Florence than were doing so; I wanted more young Americans to have a broader outlook before entering the professions. I thought some young men who did not go to college at all might be induced to go there if we said, "We will let you take the B.A. degree and the medical degree in seven years." I thought some of them might do it, and therefore I voted for this resolution.

But I have since come in contact with some facts which make me doubt whether that object was attained as well as I hoped it would be. I will just mention for the information of the Association this fact. A few years after we adopted that resolution, I happened to know some students here, I knew personally of two, who came here with the full intention of taking four full years of academic work for the B.A. degree; but, after being here a year or two, they discovered what they had not known before, that they could count one year of law and one year of medicine for an academic degree. They were able to stay here and they had intended to do so when they came. Now they suddenly discovered, "Here is a short cut," and they took the short cut. In other words, the adoption of this scheme lured these men out of the arts course into professional work, exactly the opposite of what I desired to accomplish

by my vote, and I have been very doubtful ever since of the wisdom of my vote. I do not know really whether more men have been induced to stay here three years and then go on into the professions, or whether more men who would have stayed here four years have been induced to shorten their stay to three.

MR. WILCOX: Mr. Chairman, one of the pernicious influences of the present combined-course system lies in this prostitution, if that is not too strong a term, of the courses of animal biology with reference to medicine, and political science with reference to law, for the purpose of preparing students for those professions, and I believe that the catalogues for the last few years of half of the institutions of this country that have adopted this six and seven-year combined course will show that those courses are announced more and more specifically and intentionally as pre-legal and pre-medical instruction, and I really expect them to pass out of our B.A. degree.

MR. REED: Mr. Chairman, there are certain subjects in the liberal arts course which are practical when studied as preliminary to a profession; in other words, they are a practical industry from that time forth. So the committee resolved that the students might give up that enormous election in history and the enormous election in political economy, and the election in other subjects might be considered as liberal culture. It had two very interesting results. First, that the law professors kept coming to us with the rather exasperating remark that a man who sat three years under lectures in political economy did rather better work than the man who came from the high school, because the latter had neither liberal culture nor specific training. Now we did away with the old law requirements and substituted those on pp. 17 and 18 of the pamphlet of Professor Bryan. It will be noted that amongst these courses we find that work in law requires a specific amount of work in languages, especially Latin, French, German, and Spanish, eight hours being a concession to brothers of that faith. Since this time the work in quality has risen to such a degree that a man can go into law out of the arts department and stand head and shoulders above the others. But another development is interesting, namely, that the elections in the political economy and history departments, which are required now to be noted, are not so numerous in those departments among students going into law as heretofore, so it is desired that there shall be a reorganization. The same thing is true on the side of biological study. So it comes to me, as has been stated, that we are getting into the attitude of a preparatory school for these professional departments; not that I resent that so much personally, but I resent that such work should be done with that distinctly preparatory attitude in a college which styles itself a college of liberal arts.

One sentence in answer to President Judson. We have felt also that this permission to count work in the law or medical courses is a privilege rather than a natural right, and that it ought to be given to those students whose previous work in the arts department shows clearly that they are men of exceptional power and ability. Consequently the committee takes into account not only the fact that these men have done certain prescribed courses, but also that they are men of marked ability. Otherwise, we say to them, "Four years in the arts department if you are to have our degree." We have found that has done more to elevate the spirit of thorough work in the arts department than anything that has been instituted. Of course it was at first bitterly resented; but as soon as we insisted that he should do good, thorough

work there, and then submit to the judgment of those competent to pass on it, we found that it worked admirably.

SECOND SESSION

The second session was called to order at 2:30 P.M. with Mr. Ames of Pennsylvania in the chair.

Mr. Thomas on behalf of Columbia University presented a paper on "The Degree of Master of Arts."

THE DEGREE OF MASTER OF ARTS

PAPER PRESENTED ON BEHALF OF COLUMBIA UNIVERSITY BY MR. CALVIN THOMAS

If a wise man were planning *de novo* a system of higher education for an unspoiled people not yet acquainted with that mysterious process, he would probably hesitate before deciding to make provision for any such thing as an academic degree. Of course he would perceive the advantage to the community of having a well-known label for a standard product; but he would also see the difficulty of weighing and testing an educational product that has not yet been put to use, and hence would dread the danger of fraud and humbug and letter-worship. I believe that the mere existence of the Bachelor's degree, as we Americans know it, with its enticing but illusory suggestion of finality, is responsible in no small measure for that bedevilment of college ideals which of late has been making us all uneasy. A distinguished man of science lately remarked in my hearing that the American college had become an institution for the artificial prolongation of boyhood. I do not myself think that the case is quite as bad as the epigram would imply. There is still much good in the college, and we ought to cherish and develop that good. On the other hand, it cannot be denied that a pretty large proportion of our up-to-date collegians do not really care for the things of the mind. They regard study neither as an opportunity nor as an obligation, but as a necessary evil. And why is the evil necessary? Because they covet, or their parents covet for them, the label of the college graduate. They want a diploma. Hence arises a temptation for college faculties to put the old label on inferior products and to devise new labels of more or less cryptic import. I have lately seen a list of forty-five American Bachelor's degrees. Truly a sheepskin, as Goethe observed long ago,

Ist ein Gespenst, vor dem sich alle scheuen.

Now if we could get rid of that feeling, which a pathologist might call the pergamental psychosis; if there were no such thing as graduation; if the young person left college at his convenience, carrying no visible trophy save a plain unvarnished record of his performance in the several studies pursued, many of our present difficulties would melt away as if by magic.

But these are visionary reflections which I shall pursue no farther, since I do not

intend to propose the abolition of the Bachelor's degree. We are not planning a system *de novo*, but trying to make the best use of the methods and conditions that we have inherited. And yet, what I have been saying is not entirely irrelevant to the matter in hand; for the Master's degree must obviously stand, for the present at least, in some sort of relation to the Bachelor's degree. If, then, under the operation of our go-as-you-please system, the Bachelor's degree has become all but meaningless as an evidence of specific knowledge, or of preparation for specific work, it is not very strange that we have difficulty in arriving at a satisfactory theory of the Master's degree.

Instead of speculating further in the conditional mood, let me now explain how this paper came to be written.

The recent history of Columbia University shows an amazing increase—perhaps a cynic would say an alarming increase—in the number of successful candidates for the degree of Master of Arts. Last June we turned out 269 of them. They constituted by far the largest single group in our Commencement list of some 1,200 graduates. In 1909 the number was 251. These figures suffice to show that we of Columbia, at any rate, have reason to be interested in the Master's degree. But while the degree is thus in high favor with our student body, our professors differ considerably in their estimation of it. We are still working under rules which were adopted some years ago and were based mainly on the practice of the German universities in awarding the degree of Ph.D. The idea was that the Master's degree would be normally a sort of half-way station on the way to the doctorate. The work for it was conceived as primarily a process of training in research, looking toward original productive scholarship. The candidate was required to choose a major and two minor subjects, to pursue them at least one year in residence, to present a satisfactory paper in the line of the major subject, and to pass his examinations. Thus the curriculum differed from that leading to the doctorate only in the shorter period of residence, and in the absence of any rule requiring that the graduation thesis be printed. Care was taken, at first, to impress on the candidate that he would be examined in subjects, and not merely in the particular courses that he might pursue; and the subjects that might be offered were exactly specified.

This plan worked well enough for awhile, and it still works well enough, perhaps, where departments are small. In such case the candidate takes what is offered, and may perhaps, if he has specialized somewhat as an undergraduate, actually take all that is offered on his major subject in a single year of residence. He becomes well acquainted with his two or three teachers and naturally assumes that, if he satisfies them, he will not be severely brought to book by examiners under whom he has not studied. But the case is different where departments are large and there are numerous professors giving a variety of highly specialized graduate courses in the same general line. Under such circumstances the student must choose not only his department but also his teachers within the department. He cannot possibly exhaust the "offering" in a year or even in two years. And so, if he is not to be left entirely in the dark as to what is expected

of him, it becomes necessary to give him a somewhat definite assignment of work—such and such courses—with the assurance that the work specified will satisfy the residence requirement for his degree.

Thus, with our rapid multiplication of graduate courses, we found, several years ago, that our old theory of a final general examination on subjects as distinguished from courses was unworkable for the Master's degree, and but indifferently workable for the doctorate, especially in the case of minor subjects. Gradually, without any change in the fundamental rules, we went over to the idea of an approved curriculum. And then new difficulties arose. In the first place, we could not continue to regard the Master's degree as normally a half-way station on the way to the doctorate. In recent years only a small percentage of our candidates for the A.M. have had at once the ability, the ambition, and the means to go on for the Ph.D. The majority of them become teachers in secondary schools. It is obviously irrational to require all candidates to plan a curriculum as if they were going to be Doctors of Philosophy when it is perfectly certain that not more than a fifth of them will ever even set out for that goal. And then there was the never inconsiderable contingent of those who do not expect to teach at all, but wish to pursue advanced studies along chosen lines without reference to any vocation.

In the second place, the notion of an approved curriculum required a unit of measurement—a thing that was not necessary so long as it could be assumed that every candidate would be in full residence, devoting his entire time to study, and eager to profit to the utmost by his opportunity. In the Greater New York and its vicinity there is now a multitude of secondary teachers who are college graduates, who would like to study for a second degree, and can reach our Columbia lecture-rooms in the latter part of the day. We regard it a part of our duty to the community to meet their ambition half-way, even if it becomes necessary for them to prolong their candidacy over several years. There must be for them, as well as for others, a somewhat definite quantum of work which they can measure by some known unit. We have experimented with a requirement based on hours of attendance per week, but have found it a very unsatisfactory mode of reckoning; for mere attendance tells very little as to the amount of work the student is actually doing. One attending eight hours a week may be more fully occupied than another attending twelve. It depends on the nature of the work and on the method and idiosyncrasy of the teacher, as well as on the ambition and diligence of the student. One two-hour course may call for twice or thrice as much work as another.

It was on account of these and some other perplexities that might be mentioned—for example, the proper articulation of graduate study for the Master's degree with collegiate study on the one hand and with professional study on the other—that our University Council decided, in December last, to refer the whole subject of the Master's degree to a large special committee, with a general mandate to investigate and report.

As the matter in hand was evidently a national as well as a local problem, we, i.e., the committee, undertook first of all to ascertain by inquiry among the members of this Association whether there was, in the country at large, any clear trend of opinion and practice, any approaching consensus, with regard to the various points that had been perplexing us. It fell to me as secretary of the committee to draft the questions that were to be asked and to digest the replies; and it was because of my connection with that inquiry that I was invited by President Butler to present a paper on this occasion.

Ten questions were submitted to the members of the Association, and replies were received, usually from the dean of the graduate school, from all except the Catholic University and Leland Stanford. To give an exhaustive summary of the replies, which from the nature of the case do not admit of statistical tabulation, would be impossible within the limits set for this paper. I shall therefore content myself with giving their general drift and quoting here and there, perhaps somewhat capriciously.

The first question was as follows: Do you regard your Master's degree (*a*) as a scholar's (or investigator's) degree, to be awarded for work similar in kind to that required for Ph.D.; or, (*b*) as a teacher's degree, the work for which should be planned with reference to the prospective needs of teachers in secondary schools; or, (*c*) as a "culture" degree, signifying a prolongation of the college course?

The replies indicate that, at nearly all the universities, the Master's degree is to some extent a research degree, but not always or necessarily so. Cornell says that its A.M. is a research degree "in the great majority of cases." Illinois says: "In practice we have treated the A.M. as a research degree, awarding it for work similar in kind to that required for the Ph.D." Indiana makes the A.M. a research degree "for those who take it *en route* to the doctorate." Johns Hopkins reports that its A.M. is not a research degree, but adds that the two years' work required for it "may be counted toward the Ph.D. in case of student's change of plan." Michigan estimates that its A.M. is a research degree "in about 20 to 25 per cent of the cases that arise." Pennsylvania says: "It would be safe to say that our A.M. is less an investigator's degree than a prolongation of the college course." Princeton says: "We have looked on the A.M. as marking the completion of one year's work toward the Ph.D., and, secondly, as a degree of general education, signifying an advance into higher regions of general knowledge, as distinct from specialization." Virginia says: "More and more our A.M. has ceased to be a "culture" degree, and now marks the beginning of the kind of work that leads to the Ph.D." Wisconsin says: "Our practice contemplates the use of the degree for all the purposes indicated in your sub-headings." Yale says that its candidates are of types (*a*) and (*c*), but it "recognizes no teacher's degree."

With regard to type (*b*), the "teacher's degree," it appears that all over the country the A.M. degree is more or less sought by actual or would-be secondary teachers who do not become, and probably have no thought of becoming, investigators. Michigan estimates that about 60 per cent of its candidates are of that type. But while this

condition is very general, and very generally recognized, it appears to be assumed that instruction of a professional tinge is unnecessary or even undesirable. In other words it is assumed that the prospective teacher will best fit himself for his special work, either by taking a course in special research, as if he were going to be an investigator, or else by seeking to enlarge his general knowledge of the subjects that he expects to teach. On this point I quote the reply of Harvard: "Of the three types which you mention our degree approximates most closely that of the 'scholar's degree,' and the work which leads to it can in almost every case form part of a program for the degree of Ph.D. At the same time we realize that a large number of students who receive the A.M. are not of the quality which ought to go forward to the Ph.D., and that the degree of attainment which they have reached is about that desirable for a teacher in a secondary school. To my mind the justification for the A.M. is the encouragement it gives to prospective teachers to do a substantial year of graduate study in the lines which they are likely to teach; but the purpose of this study would, in most cases, be defeated if it were directed specifically to the problems of teaching in secondary schools. Whatever special training may be desirable for this should be additional to the year of study in a particular group of subjects."

As for type (c)—those who do not look forward to the doctorate and do not expect to teach, but merely desire to improve their general education—it appears not to be recognized or provided for at all by Chicago, Illinois, or Kansas. Cornell has the type "only to a very small extent." Iowa says: "The type is discouraged, but a good many women students come under that category." Indiana provides a "culture-degree" for "a very few persons of leisure favorably located near the university." Michigan groups from 15 to 20 per cent of its candidates in the class under consideration. Johns Hopkins, Minnesota, Pennsylvania, Princeton, Wisconsin, and Yale answer, in effect, that they have the type to some extent.

The second question was: In case you have candidates of all the types indicated above, do you differentiate your requirements accordingly? In other words, have you more than one way of approach to the A.M. degree?

The replies indicate that in general there is no formal, statutory differentiation of requirements. Kansas, Michigan, and Minnesota are exceptions. Elsewhere the problem of meeting diverse needs is solved, or a solution of it is attempted, by an elastic general regulation providing for the approval of the separate courses by the departments concerned, and of the curriculum as a whole by the dean. Chicago writes: "In substance, our requirement is that the work for the A.M. must be selected according to some rational plan approved by the deans of the graduate schools, and by the departments where the work is done." Wisconsin writes: "We do have candidates of all the types indicated by your symbols (a), (b), and (c). Our requirements for the degree are so flexible as to cover all of them, and we make no distinction between the several routes by which it was obtained."

The third question was: Do you require residence for the A.M. degree, or may the work be done partly or wholly *in absentia*? If residence is required what is your rule as to its duration?

The general practice is to require at least one year of residence, Johns Hopkins being exceptional in requiring two. Several respondents remark, however, that candidates often take two years to obtain the degree. Illinois, Minnesota, and Yale permit their own graduates to work for the A.M. degree, to some extent, *in absentia*. Indiana has had a similar arrangement, but has abolished it. Wisconsin requires a half-year, or three summer sessions, from its own graduates, permitting them to finish *in absentia*.

The fourth question related to the articulation of graduate with undergraduate study.

It appears from the replies that graduates and undergraduates are nearly everywhere instructed together to some extent—more in certain departments than in others. The paper presented by Mr. Kinley at the Tenth Conference of this Association shows that we have thus far nothing like a clear cleavage between graduate and undergraduate work. They interlock variously and are separated not by a line, but by a wide, vague, and variable belt. Under such circumstances it is not strange that nearly all the universities have some provision whereby a specially competent undergraduate who is nearing the end of his curriculum may take a certain amount of graduate work and count it for a second degree.

The fifth question was intended to elicit information as to the prevalent mode of measuring graduate work in the official formulation of requirements.

Ten universities say that they cannot, or do not, state their requirements in terms of "units" or "points," seven that they do. At Chicago the word "major" means a course of four or five hours a week pursued for a quarter of a year, i.e., twelve weeks, and a candidate for the A.M. must complete at least eight majors of resident, graduate work and write a thesis, which is estimated as equal to a major. This would mean, for institutions on the semester basis, from 12 to 15 hours a week for two semesters. Illinois says: "We require each student to attend not less than four or more than twelve hours a week." Kansas says: "Our requirement is fifteen hours of classroom attendance for one year." Michigan says: "As a usual thing our graduates can satisfy our requirements by passing courses aggregating twenty-four to thirty-two half-year points." Pennsylvania says: "The minimum requirement is twelve 'standard courses,' the standard course being a lecture course of one hour a week for one year." Wisconsin says that its "normal work for the A.M. degree is from nine to twelve hours a week of strictly graduate work, supplemented by private reading and laboratory work." Princeton says: "Our rule requires a minimum of three graduate courses throughout the year. These are usually three-hour courses." Virginia does not use the term "unit" or "point," but requires in general four three-hour courses for one year. Yale requires "eight hours per week of strictly graduate courses."

The sixth question related to majors and minors, and rules governing the student's choice of courses.

Chicago says: "The most of the work for our A.M. is done in one department. Any work outside that department is done chiefly in some closely related department, and is taken with the advice or consent of the department of principal work." Cornell requires a major and one minor subject, and has no other rule restricting the student's choice. Iowa says: "One minor is recommended if the degree is to be taken in one year"; has no rule regarding minors, save that they "must be related and must not be taken under the same man." Michigan "generally requires," when the degree is taken under its Plan A (intensive study), that "one of the two minors be in a department different from the major." Princeton says: "All we require is that the courses be well related and suitable to the candidate's needs and attainments. This involves personal investigation of every case on its merits." Virginia requires its "four courses" to be "in at least three different subjects," but might count ethics and psychology as two subjects. Yale "does not differentiate between major and minor subjects, but considers the course as a whole."

The seventh question related to the preliminary requirement of a Bachelor's degree.

The replies indicate that this requirement is everywhere pretty strictly enforced, with occasional relaxations in favor of foreign-born students. As for the holder of an ostensibly inferior Bachelor's degree, he is variously treated. In some cases he is required to register as an undergraduate and win the Bachelor's degree a second time; in others he is given standing with graduate students, but is required to make good his deficiencies at the cost of prolonging the normal term of residence for the A.M. Iowa has a peculiar expedient for dealing with the difficulty created by the graduates of weak colleges. Mr. Seashore writes: "We follow the rule of accepting the degree of all colleges whose entrance requirements are approximately up to the standard, and which require a *bona fide* four-year course. The student is 'admitted' on this degree, but he does not become a candidate for the A.M. until his department recommends a specific thesis topic for him." Princeton says that its rule is more elastic in practice than in theory, because it has found out that a good man from a poor college is preferable to a poor man from a good college.

The eighth question related to the requirement of a thesis.

The replies indicate that a thesis is invariably required at Chicago, Clark, Cornell, Illinois, Indiana (except in the department of Latin), Iowa, Johns Hopkins, Minnesota, and Missouri. It is not required by general rule, but may be exacted by the department of major interest, at Kansas, Michigan, Princeton, Virginia, Wisconsin, Yale. Pennsylvania says simply: "No thesis is required for the A.M. degree." As to the character of the thesis required, when it is required at all, there is considerable diversity. In certain institutions there are departments which are not equipped for work of the Ph.D.

grade. Such maintain a relatively higher standard for the A.M. thesis, insisting on real research, even if the candidate is not going on to the doctorate. In general, however, the Master's thesis is an essay which differs from a Ph.D. dissertation in being shorter, less ambitious, less original.

The ninth question related to the requirement of a final general examination.

It appears that such an examination is invariably required by Chicago, Clark, Cornell, Iowa, Johns Hopkins, Minnesota, Nebraska, Wisconsin. It is not required by general rule at Illinois, Indiana, Kansas, Michigan, Missouri, Pennsylvania, Princeton, Virginia, Yale.

The tenth question related to the counting for the degree of A.M. of courses forming part of a professional curriculum, in law, medicine, theology, or engineering.

With regard to this there is a diversity of practice. The thing is not done at all, it seems, at Michigan, Minnesota, Princeton, Virginia, Wisconsin, Yale. At the most of the universities, however, it is done under varying restrictions. Sometimes the restriction is a form of words intended to exclude from the A.M. curriculum professional courses bearing on the technic of professional practice, but to permit the inclusion of such as relate to the theory, history, and progress of the underlying sciences. The Harvard rule permits the inclusion of approved professional courses, provided that no such course be counted simultaneously for the A.M. and for a professional degree. Chicago's rule is "that courses given by the faculties of law, medicine, etc., which are open to the general student who is not studying law or medicine, would be counted if they fell within the general regulation that the work for the A.M. degree must be selected according to some rational plan approved by the deans; and further if they were regarded as sufficiently advanced courses to be recognized for the higher degrees."

So much for the questions asked and the answers received by our Columbia committee. Our purpose was, as I have said before, to ascertain whether in the country at large there was any discoverable trend toward uniformity of theory and practice; in other words, whether anything like a national standard for the A.M. degree was evolving. The replies seem to show that there is no such trend. The requirements are diverse, the state of expert opinion very unsettled. Perhaps the nearest possible approach to a generally valid formulation would be something like this: The degree of A.M. at the better American universities now stands for at least a year of so-called graduate work (the concept "graduate work" being highly variable and elastic) following a Bachelor's degree of some kind, done mostly in residence, and devoted to a subject, or a small group of subjects, chosen under various local restrictions.

The question is now to be considered whether this Association should take any steps with the view to giving the Master's degree a somewhat more definite significance. Let us use that phrase, if you please, instead of talking about standardizing the requirements. It appears that there are those who dislike the word "standardize," as used in this connection, presumably on account of its commercial and materialistic flavor.

I do not wish to prejudice the idea under consideration by connecting it with a word which anyone can regard as objectionable.

And as to the idea itself—the abstract question whether it is worth while to try to find a basis of agreement—let me say right here that I personally have no very ardent conviction in its favor. I can see that there is something to be said on both sides. If the A.M. degree were conferred only by universities worthy of the name, I think I should favor a *laissez-faire* policy—at least for another decade. We have certainly made great progress since the time—and it is not so very long ago—when the Master's degree was usually conferred “in course” without any requirement of study whatsoever. It now stands, so far as the members of this Association are concerned, for at least a year of graduate study in residence. Are we not, then, doing well enough? There is much to be said in favor of a loose conception of the degree, which permits it to be held out as an incentive to advanced studies of any kind, or in any combination, that suits the student; much in favor of a flexible curriculum adapted to individual needs and purposes. It would be unwise to surround the degree with restrictions based on any rigid theory. Under ideal conditions, the university problem is simple enough in theory, though endlessly difficult in practice; we have to bring together the good teacher and the eager student, to provide them with shelter against the wind, to give them the necessary tools, and then—get out of their way. Whatever makes for the free play of idealism in teaching and in study is good; whatever makes for bondage to routine is bad.

But, now, there are some countervailing considerations. In the first place, the Master's degree is not conferred exclusively by universities that are worthy of the name and can be trusted to maintain a high standard under a régime of perfect liberty. It is also conferred by a host of institutions which are not properly equipped for graduate work of a high grade, but would like to be thought thus equipped. As for the Bachelor's degree, it can now be had from all sorts of institutions, some of which are virtually high schools. If then, in the country at large, we are to have no standard at all for the Master's degree; if it is to betoken nothing more definite than a year's study following a Bachelor's degree, there is reason to fear that the second degree may gradually lose such prestige as it has now acquired at the better institutions, and become a sort of academic joke. On the other hand, it is at least possible, and it seems reasonable to hope, that if our leading universities, as herè represented, were to unite in a well-considered effort to give the degree a more definite significance, their influence might gradually prevail over weaker competitors and ultimately establish the degree on a firm basis of public regard and public utility.

Again, conditions are seldom ideal, even at the best universities. Your candidate for the Master's degree is not invariably actuated by the pure idealism of study. He may be actuated by a desire to get the degree on the easiest possible terms. He may be a virtuoso in finding the lines of least resistance. For such there is need of hurdles in the curriculum.

Finally, your professor is not always an inspired or an inspiring teacher. He may have had the gift and have lost it. He may be more interested in his own studies than in the business of teaching. He may have too much administrative work to do. He may have more students than he can teach in accordance with his own best insight. A new man, while learning by experience, may exact too much or too little of his students.

These are commonplace observations, but they point to the necessity of some kind of general official regulation from above. The régime of absolute liberty opens too wide a door for departmental remissness.

The practical problem is, then, if this problem is practical at all, to find a basis of agreement, such as will enable us to steer a middle course between too much and too little regulation. After much reflection I am of the opinion that there are two points at which this Association might well attempt some regulation of the requirements for the Master's degree. The first point is the matter of specialization; the second, that of preparation. If there could be some kind of agreement with respect to these two things, I think that everything else could best be left to local autonomy and to the free play of the student's choice. My first proposition is this:

The backbone of every curriculum for the Master's degree should consist of intensive university work in some one subject, to which the candidate should be required to devote the major part, and permitted to devote the whole, of his working time for at least one year; his working time being estimated at from forty to forty-five hours a week, including classroom attendance.

This proposition involves no very radical departure from the prevailing practice of the present time. It simply describes what we are all doing now in the vast majority of cases. It does mean, however, that the scattering, invertebrate curriculum must go; that every candidate must have a specialty, and that his work in that specialty shall be the prime requisite for his degree. At the same time, it leaves considerable latitude for free election and for the pursuit of necessary studies germane to the major subject.

If we wish to establish the degree firmly in the public regard we must make it tell something that the public wishes to know. Now what do we care to know about a Master of Arts? First, where he got his degree. Second, what he is specially fitted to do in the way of teaching or other social service of an intellectual character. Whatever our theories may have been, the time has come to recognize the fact that the Master's degree is now a vocational degree. The great majority of those who study for it consists of persons who expect to go into teaching or some other employment calling for special knowledge of some particular subject. Their purpose is to get the training, the prestige, and the backing necessary for a good start in their chosen vocation. Only a small percentage of them have the time, the money, and the inclination for the pursuit of studies that have no obvious bearing on their life-work. Some have, to be sure, and they should not be turned away. But why should they bother their heads about

a degree? There is no reason that I can see, except that national obsession of ours which I have called the pergamental psychosis. We ought to try to counteract that; to do what we can for the idea that it is a perfectly respectable, indeed a rather admirable, thing to study at a university for a year or two or even more, and then go on one's way rejoicing without a sheepskin. But if a person of this class *will* have a diploma, in spite of the fact that he does not expect to use it as a pawn in the game of life, it is only right and proper that he conform to a regulation which is in the interest of the vast majority of candidates and of the public at large.

Aside from the matter of specialization, the proposition that I have submitted involves another point which I have no time to discuss, but will merely mention in passing. It suggests a mode of measurement based not on the number of hours per week spent in the classroom, but on the total time per week required for the course.

My second proposition is this:

Candidacy for the Master's degree should presuppose not only a Bachelor's degree from an institution of reputable standing, but also a definite and specified amount of preparation in the major subject chosen.

This is a more difficult matter to handle, but I think the difficulties are not insuperable. The discussion at Ithaca a year ago made it clear that between graduate and undergraduate work as such there is no difference that can be formulated in a way to satisfy the critical intellect. Any difference that we try to establish must be mainly a matter of convention. If we think of any particular subject and ask just how much study of it is proper to the undergraduate curriculum, there is no philosophic answer to the question possible. It is like asking how much political economy a man ought to know on reaching his twenty-first birthday. Neither the nature of the subject, nor the mode of teaching it, nor the spirit of the student, nor all these factors together can furnish a really scientific basis of classification.

But that which cannot be done by philosophy can be done by convention, if we were to organize a number of conferences for that purpose. There is no subject more intractable, for the purpose under consideration, than German; for in our graduate work we have to do with the greatest possible differences in preparation. There are German Americans who have been bilingual from childhood; others who have studied German for two, three, or four years in the high school, and yet others who have begun it in college. Yet I believe that, if the professors of German were to come together and discuss this problem for a day or two, we could reach an agreement as to the amount and kind of work in German that might reasonably be insisted on as a preparation for graduate study with that subject as a major. There would at first be a wide difference of opinion, each having in mind the present procedure of his own university, but we should finally come together. The result would be to create a norm that would be very useful not only to the members of this Association but to all other institutions which confer the Master's degree. It would be possible to describe that norm in terms of knowledge

and of power, so that an examination could be held upon it. And if the thing could be done for German, as I believe it might, it could surely be done for Latin, or botany, or mathematics. The conditions of candidacy for the Master's degree would then be (1) a Bachelor's degree, or its equivalent, as an evidence of sufficient general education; (2) a searching examination in the normal preparatory requirement agreed on for the major subject.

I offer these propositions for consideration.

MR. AMES (Johns Hopkins): Mr. Chairman, I would like to say something about the Master's degree, and if I speak at all it is as one very ignorant of the degree outside of Johns Hopkins. Our degree differs in many respects from that which Mr. Thomas discussed, and I think it included a great deal which Mr. Thomas explains in his paper. Certainly our experience at Johns Hopkins has shown us that a student at the end of one year in graduate work has not attained to sufficient understanding or sufficient knowledge of difficult subjects which makes him worthy of having a mark which would indicate that he has accomplished something. If degrees mark anything, they mean that the student has accomplished something. It is a separation of the past from the future, and certainly one year in graduate work in our experience does not mean that. I think that most of us find that at the end of one year of graduate work the student has gotten into an attitude of mind which renders him able the next year to accomplish some work of value. Therefore it is our rule to give the degree at the end of two years instead of one. I can only say that it has worked extremely satisfactorily.

MR. VAN HISE: Does it interfere with your Doctor's degree?

MR. AMES: Not at all. There is the same difference between the Doctor's degree and the Master of Arts as between Doctor of Philosophy and Doctor of Medicine. The idea was to emphasize that at the end of two years of graduate work the student had gotten into a frame of mind absolutely different from that he had as an undergraduate student, where he would be in a certain sense a scholar.

In connection with the Doctor's degree, one of our great reasons for having a second higher degree was to emphasize clearly to the student that we intended to reserve the Doctor's degree, for one thing, for ability in original research. Men have abilities along different lines, some are equipped for research while others are not. Some are equipped for becoming absolutely good teachers and yet are utterly incapable of original investigation, while the converse is true. Our idea in using the Master's degree was to emphasize that dual character of intellectual work, and that we intended to have the Doctor's degree reserved exclusively for men who could do original investigating work, not men who could carry on such work under the guidance of a professor and do nothing afterwards, but men who have that sacred fire; and, on the other hand, to recognize the fact that there were men who could achieve great distinction in their professional work, but not carry on original work. I can speak for science only, but there is a great demand for men who can achieve distinction in their subjects. We chose the Master's degree for that. I may say that this higher degree from this standpoint is a great help to a director of a library or a department, because he is able to tell a man frankly that he is not fit for original research, and tell him to take up some line of work in which he may

succeed. It is perfectly obvious that having that degree at hand removes a great deal of pressure from the head of the department, and I may say that it removes sometimes temptation.

MR. HASKINS: Mr. Chairman, I think Mr. Ames points out one of the difficulties in the Master's degree. We are not certain what we want it to mean, and we are not certain what we want the Doctor's degree to mean. If we mean by A.M. that a man can teach a subject satisfactorily in a good secondary school, that is a definite standard. On the other hand, there is a certain group of men who expect to teach in colleges, who ought to be trained somewhat further than undergraduate work. I can see that probably a man in two years' time ought to be taught some methods of research and be given some appreciation of what other men are doing at it, but we cannot hope that the undergraduates should ever do any productive work of their own. At present we do not meet the needs of that class of students. Very likely this suggestion does.

There are two classes of men who take the Doctor's degree at this time. There is one class of men who will become good teachers in the smaller colleges, men who have enough of the spirit of learning to assimilate what has been done by the men who are advancing it and to keep reasonably in touch with them, but who will not become scholars, and there are other men who ought to be university scholars. We include both of those classes under Ph.D., just as we include two classes under A.M.

Some of you heard a paper read before the American Historical Society some years ago on the question of "Historical Doctor," suggesting some higher form of Historical Doctor in order to define the two and encourage men in going forward. The A.M. is straddling two things, if not the third thing, that Professor Ames spoke of, which is not so very serious, however. The Ph.D. really covers a multitude of things, and we call a lot of things research for Ph.D., and say that a man is qualified for research when he never will be qualified.

MR. SEASHORE: Mr. Chairman, there is a temptation before which we are liable to fall, the tendency to make a research man out of everybody. It seems to me that the question that is uppermost in every mind, when a new student comes in, is this: Where shall we find something for this student to live for? That is where the research subject comes in, he can lose himself in that while he is in the university. Is it necessary to say that those who cannot go into research shall simply go on and take the course? Is it possible to develop, or has someone developed, some means of encouraging these men to do something thoroughly and to break away to that extent from the undergraduate method?

MR. BARROWS: Mr. Chairman, I was interested in the statement about the increase in numbers at Columbia seeking this degree. In a similar way I think it is observable at the University of California. We had this year one hundred and sixteen candidates anxious to take this degree, and eighty-one have been admitted to candidacy. With us it is largely a teacher's degree, that is, it is taken by a great many students who are there seeking preparation in school teaching, but a considerable number have not this end in view. A great many are taking it in the course of agricultural study, and there are a few who are seeking it in connection with professional work. The regulations of the University of California permit the granting of the Master's degree after two years of work for medicine or for law, providing the student takes four hours of research work outside of the course and writes a thesis. In this way some

very creditable theses have been written in physiology and medicine and some other departments, and the plan seems to be working satisfactorily.

MR. HASKINS: Mr. Chairman, I would like to ask a little more about the relation of the A.M. to the secondary school in California.

MR. BARROWS: The Master's degree is not required for secondary teaching, but one year in graduate study after the Bachelor's degree is ordinarily required in order for one to be certified by the State Board of Education as eligible for appointment as a teacher in a high school. Something over three hundred teachers in the high schools, however, have the Master's degree at the present time, out of perhaps thirteen hundred. In the case of a teacher who has had two years' experience in teaching, the university's requirement in graduate work may be satisfied by a half-year, a single semester. A man must have specialized sufficiently in his undergraduate work in order to pursue the subject for a Master's degree afterward, and that presents some difficulty: students come and desire to enter some department as candidates for the Master's degree, or even as postgraduate students, who have not had sufficient undergraduate experience.

MR. VAN HISE: And you do not grant the Master's degree for that? Very frequently one who has taken an A.B. degree wishes to broaden his education, wishes to take perhaps two or three other subjects for a year: you would not give him a Master's degree?

MR. BARROWS: I think we would, but he would have to choose his major subject along some line in which he has had sufficient undergraduate work to enable him to appreciate real graduate study.

MR. THOMAS: Mr. Chairman, I purposely used the word vocation rather than profession, because in New York there are various vocations besides that of teaching, which are more and more attracting students and encouraging them to obtain the Master of Arts degree. That work is museum work, social settlement work, and a number of other things calling for specific training in more than one subject. According to my use of the word, profession might perhaps suggest law, medicine, or engineering more than I intended to. We have a good many men in New York who are studying theology and also wish to do work in the New York School of Philanthropy. In my paper, I emphasize a subject that seemed to me a desirable and fundamental requirement of the degree, the idea that when a student went in for general education, that must be indicated for better or worse by the Bachelor's degree and that the Master's degree should indicate special proficiency in one subject in which the student has done at least one year of graduate work of an intensive character.

With regard to the remark of Mr. Haskins, as to how this norm should be prescribed, I have nothing very definite to suggest, my own mind is not made up entirely. I see some objection, however, to the system of years, because, with the great variety of elective courses with different hours a week, a year's work is somewhat a vague expression, and yet it might be, in some cases, desirable to describe it that way. But I fancy that if the professors of every subject, botany, Latin, German, French, chemistry, whatever they might be—if they were to meet for the discussion of this subject and enact what sort of instruction should be assigned to the secondary school and to the college, what ground should be covered, what knowledge and what aptitude should be sought out, I think their determinations would be useful. We would

have then a conventional norm which would always be vulnerable so far as the philosophical mind is concerned, but education is full of those. There is no reason why Virgil should be read in high school and Horace in college, for instance. We have conventions all along the line in this way, and I see no objection to a conventional norm in each subject, indicating the ground that should have been covered before one is fit to take it as a subject for the Master's degree. I think it would be better to describe it in terms of knowledge and power, to describe it as a range of knowledge on which a student should be able to pass an examination. I believe it could be done in the case of my own subject, and if we are able to do it for that subject, we can do it for others, for there is no subject more intractable than German. Of course if others are of opinion that the Master's degree should still serve as a culture degree, they would be opposed to this, but whether they are opposed or not, the Master's degree has become a vocation degree and is going to be more and more so as time passes. It means special proficiency in some one subject. It is not building a fifth story on the college course, but it means special training in some one subject, which is a further advantage, too, in that some particular department interests itself in the graduate student and looks out for his training in a more earnest and serious way than if he were dividing his time about equally between three and four departments. That is the way the matter presents itself to my mind, and if that line of argument is regarded as at all convincing, the first proposition I made will present no particular difficulty to the Association. The second, I admit, would, as it might turn out to be impracticable, but at the present time we have a sort of norm as to what the undergraduate course which follows the preparatory course should be in any particular subject. Graduate work is work done by the graduate student, and that is about all you can say. It has the further disadvantage that is it affected by the secondary schools. The secondary schools in my judgment are trying to teach too many different sciences, they undertake too many, a little botany, a little geology, and a little zoölogy, and so on. It would be a good thing for American education if it were recognized that certain sciences might be taught in the secondary schools and certain others ought to be left until college is reached. We have reached an unfortunate condition of affairs in which the secondary schools are trying to give little bites or nibbles of the different sciences without encouraging the scientific mind of the student at all. If we could reach a norm as to these various specialities, I believe it would be a good thing.

MR. MERRITT: Mr. Chairman, it has been brought out in this discussion that the Master's degree is coming to be more and more a teacher's degree, or very generally so regarded. It seems to me for that reason, recognizing that as a fact, it becomes more important that the requirements of the Master's degree should be suited to that condition. In discussions I have frequently run across the idea that, in the case of a teacher in a secondary school, ability as an investigator or for work of that sort is not by any means essential; that what the secondary school teacher needs is a thorough knowledge of his subject so that he can present those things already known in a good manner. It seems to me, if that idea is according to the facts, and I admit, of course, that there is a good deal of truth in it, we run a great risk of bringing the standard of secondary teaching into a very unfortunate condition. It seems to me that the secondary teacher is in a position to exert a great deal more influence upon the student than even the university teacher in a majority of cases, because the student's mind is more plastic, more ready to receive impressions. It seems to me that one thing that we want to do for the

young people of the country above all others is to give them the spirit of progress and independence of thought, of inquiring into things in an open-minded sort of way; in fact, we want to give, so far as possible, the spirit which is characteristic of research and investigation in any field; and it seems to me very important that the teachers in these secondary schools should themselves have very strongly this spirit. It is not by any means necessary, I presume, that the high-school teacher be a great investigator in his particular subject; it would be preferable if he could make an occasional contribution; but it seems to me that he should have a clear impression of the point of view of the investigator, so that he can give something of that view to his students. So it seems to me that in training the teachers, in specifying the requirements of the Master's degree, if it is to be a teacher's degree, that point ought to be kept in mind, that we want to give the teacher a certain independence of thought and a certain originality of thought, in order that he may give it to others, not necessarily that he may himself be one that helps to direct the progress of knowledge.

Now is there any other way to give that to the teacher than to give him experience in investigation? It seems to me it will be hard to find better means than that. So it seems to me that it would be very unfortunate if the requirements of the Master's degree were so modified as to permit of that degree being obtained without something very near to original investigation.

In my subject, physics, and in many other natural sciences, it is by no means impossible for a student working for the Master's degree to do a piece of work which is purely original. I think the majority of those taking the degree with us have had their theses published. I am confident that in many branches of knowledge that is not true, that it is quite impossible for a man in one year to make any contributions. Nevertheless, even there, it seems to me, something in the nature of a thesis, even if only an essay, should be required, in order to give the man something at least similar to the work of investigation and to help instil the matter in his mind. I should be very sorry, therefore, if the thesis for the Master's degree was done away with, as seems to be the case in many instances at present.

MR. VAN HISE: Mr. Chairman, the case of the University of Wisconsin is somewhat different from that of most institutions. We have a requirement for a paper or thesis for the Bachelor's degree, and a man is excused from the requirement of a thesis for the Master's degree only in case he has already written a thesis for the Bachelor's degree. So a thesis is required at some stage of the work of each person who receives the Master's degree.

MR. DOWNEY: Mr. Chairman, I think in some cases something like a norm has already been reached, the matter having been taken up in the national societies for those subjects. In mathematics it has been taken up by the American Mathematical Society, but I cannot say that it has been taken up by the Chicago branch of that society. If that Association were to pass a resolution to the effect that a certain minimum ought to be required, of course it would not make it binding on any of the institutions represented there, but would simply be to the effect that it was the sense of that society that there ought to be a certain minimum amount. I cannot say positively without my notes what was proposed in the American Mathematical Society, but I know it was far enough to include the integral calculus, which means in some institutions three years and never less than two, and when you take into account that that

means that the student must have had at least three years in the high school, it is at least a respectable amount of mathematics to build on for the Master's degree. I think the matter has been discussed in various associations in other lines of work. In the case of mathematics I think we have considerable uniformity now in the institutions in the Middle West.

MR. JORDAN: Mr. Chairman, we are spending a great deal of money in this country, and a great deal of thought, on graduate work, and the results are very discouraging. Out of four or five thousand graduate students, fifty or sixty are going to be capable of doing graduate work. The number of professors teaching graduate work is very great, and yet the number of them capable of doing anything of that kind, really, is very small. My idea is that it might be good to hold an examination of professors, to determine those who are capable of teaching graduate work. I saw one case where a load of coal went by, and the students were told to watch that load of coal and decide the different angles to the horizon at which the lumps fell. That would be work requiring long and tedious investigation and would lead to nothing in particular, except that when coal falls it falls more or less flat. There are a great many instances like that. In one of our universities the professor in German gave the students a chapter of Luther's Bible to write out in long-hand, and then see what changes they could make in it. With the students it was absolutely elementary copying, without anything coming at the end of the work. There are so many discouraging elements all along the line, that one is ready to accept almost any solution of the problem, because graduate work, to amount to anything, means the right kind of inspiring teacher going up against the right kind of students.

MR. DAVENPORT: Mr. Chairman, I happen to know that there is a growing demand for graduate work in agriculture, at least for the Master's degree in agriculture, whatever that means. Most of the students that come to us divide themselves into two classes: one class wants a fifth year in agricultural work, and the other class desires to be initiated into the mysteries of research work. When you take this class of students, they exhaust the energies and resources of the whole department. In other words, it seems impossible to find a problem in agriculture that is significant. In other words, the difficulties in attempting to meet this demand through the Master's degree seem almost insurmountable and have given us a great deal of difficulty.

On motion, the Association then took a recess until the next day.

THIRD SESSION

The third session was called to order at 10 A.M., with Mr. Ames of Pennsylvania in the chair.

Mr. Van Hise, on behalf of the University of Wisconsin, presented a paper on "The Appointment and Tenure of University Professors."

THE APPOINTMENT AND TENURE OF UNIVERSITY PROFESSORS PAPER PRESENTED ON BEHALF OF THE UNIVERSITY OF WISCONSIN BY PRESIDENT CHARLES R. VAN HISE

The subject, appointment and tenure of university professors, divides itself naturally into two parts. With the question of appointment will be considered also that of

promotion. The statements of fact given below are confined to the twenty-two universities which belong to this Association, viz.; California, Catholic, Chicago, Clark, Columbia, Cornell, Harvard, Illinois, Indiana, Iowa, Johns Hopkins, Kansas, Stanford, Michigan, Minnesota, Missouri, Nebraska, Pennsylvania, Princeton, Virginia, Wisconsin, and Yale.

FACTS AS TO APPOINTMENTS AND PROMOTIONS

The appointment and promotion of members to professorial rank, with the exception of associate professors at Catholic University, rest with the governing board. Instructors and men of lower ranks are sometimes appointed by the senate, faculty, or president. Thus at Columbia they are appointed by the faculty subject to confirmation by the board, and such confirmation is purely formal. The governing boards have different names in different institutions. In the endowed institutions the boards are usually called trustees; in the state universities, regents; but neither of these rules is invariable. At Harvard and Yale the governing boards are called corporations; at Missouri the governing board is one of curators; at Iowa, a board of education; at Virginia, the rector and visitors.

The important point with reference to appointments and promotions is not as to the nature of the organization which makes the appointment, but as to the representatives that make the recommendations to the board; for in most cases, as long as these representatives have the confidence of their board, an appointment or promotion when recommended is made. The functions of the board in this matter are primarily financial. The creation of a chair rests to a large extent with the board, since whether or not it can be supported depends upon financial considerations. If the recommendations made can be financed, they are likely to be accepted; but if not, they may be rejected on this ground. Also on other grounds a board may exercise its veto power. But almost without exception the boards do not regard it as their function to take the initiative in appointments and promotions. Such initiative they place with the educational officers.

Occasionally the members of a board of trustees have dealt directly in the appointment of members of the instructional force. This is true at the present time to some extent in one of the institutions of the twenty-two, but this situation is exceptional and even in this institution is probably temporary. Almost without exception when an appointment has been authorized by the board, the recommendation of the president or some other representative or representatives of the faculty is decisive.

In seventeen of the twenty-two institutions of this Association the recommendations as to appointments, promotions, and removals rest with the president, chancellor, or provost of the institution. In this paper the term president will be used to comprise all three. Of these seventeen institutions, in three the recommendations can be made only after the concurrence or consultation with other academic officers. These are as follows:

At Kansas the recommendations go to the governing board through the chancellor, but such recommendations must come jointly from him, the dean, and head of the department concerned, the chancellor having the veto power if he wishes.

At Cornell the "statutes require that the president shall consult with the heads of departments before making nominations in these departments."

At Stanford appointments and promotions with reference to which the president has the initiative must be submitted to an advisory board consisting of nine members, of the rank of professor, and when the president submits his recommendations he must state whether or not they have the approval of the advisory board. A part of the advisory board is elected from specified groups of departments and others are elected at large, all elections being without nominations by secret ballot of the academic council. The term of office is three years, and one-third go out of office each year. Every nomination, promotion, or removal of the instructional force, large or small, goes before this board. In connection with this matter it is to be said that Stanford has no deans, the president dealing with each department through its executive head who is annually appointed by the president with the approval of the advisory board.

The five institutions in which the recommendations to the board are not made by the president are as follows:

At the Catholic University of America appointments of professors are made by the board of trustees "after consultation with the academic senate and with the faculty of the school comprising the department to which the appointment is to be made." Associate professors "may be appointed by the academic senate, after consultation with the faculty of the school to which the appointment is to be made. . . . The academic senate consists of the rector as president, the vice rector, the general secretary, the presidents of the university colleges, the deans of the faculties, and two professors from each faculty."

At Johns Hopkins appointments are made by the board upon the recommendation of the academic council. This council consists of the president and ten professors.

At Minnesota appointments are made upon the recommendation of the dean of the college concerned after consultation with the president. In this case the usual positions of the dean and president are reversed.

At Pennsylvania the faculties of the several schools make recommendations for appointment and promotion to the trustees and provost. In case the provost does not concur in a recommendation he retains the right of veto; but as a matter of fact the present incumbent has in no case exercised it.¹

At Yale "nominations for positions in the faculty of any existing department except the graduate school shall come originally from the permanent officers or governing board of that department." The term department as there used is equivalent to

¹ Since this article was written, the provost who had been for some years at the head of the University of Pennsylvania has resigned.

school or college under the nomenclature adopted by this Association. The faculty of the school or college acts upon the recommendation of a committee of five professors appointed by the dean, two at least of whom are from departments of study outside of the vacant professorship. This committee after conference with the president and dean presents its recommendations to the faculty of the school or college. The recommendation of the school or college is transmitted to the corporation. In the graduate school the nominating committee is appointed by the president rather than by the dean.

Also at Harvard, in the medical school, the recommendations are made to the governing board by the full professors instead of by the president.

The procedure at Columbia is somewhat exceptional in the matter of appointments, in that recommendations to the trustees for men of professorial rank are by their own board of education. Since, however, the president presents the names and records of the persons proposed with his expression of opinion concerning them, the result is the same as if he made formal recommendation to the board; and therefore Columbia is included in this class of institutions.

In the cases of the academic senate of the Catholic University, the academic council of Johns Hopkins, the faculty of Yale, the president is a member; and at Yale he must be consulted by the faculty nominating committee; not only so, but "no decision of the faculty shall be valid which does not receive the concurrence of the president unless it shall be discussed and approved by the corporation."

Therefore it is clear that even in these five cases the president has much influence in the matter of appointments, etc. Since the president makes the recommendations to the governing board as to appointments, promotions, and removals in the case of seventeen institutions and his recommendations are usually accepted, the point of paramount importance in connection with appointments and promotions is as to the manner in which the president exercises his authority. As we have already seen, in three institutions the president is required to advise with a definite body of officers before acting. In one case the president has a definitely announced plan of taking advice before making the nomination. Thus, in California, the president has, "at his own option and by his own suggestion, called together a committee consisting of professors of five nearest related departments for conference as to the nomination of any one professor. The nomination of assistant professors and instructors is made by the president after conference with the departments concerned."

In the great majority of cases, fourteen in number, so far as I have been able to ascertain, the president makes his recommendations without any definitely announced plan of conference but with a very definite method of securing advice.

1. Usually where the university is organized into schools and colleges with deans or directors, the nominations of all officers in a school or college are made after consultation with and the concurrence of the dean or director. Indeed, in many institutions the dean or director is expected to take the initiative in going over the ground and

getting the material ready to present to the president. This is especially likely to be true of the professional schools, but in some institutions is true of all schools and colleges.

2. The president frequently, and in the case of some institutions usually, consults directly with the professor acting as the executive head of the department, and he may also consult with other professors of the department. This is especially likely to be true of the college of liberal arts or a college of arts and sciences, as for instance, at Harvard and Michigan. In this case the duties of the deans mainly concern the students. This situation is historical, in former years the president of the modern university having had as his main or sole function the presidency of the college of liberal arts. In consequence of this situation, in many institutions, the relation of the president to the departments of the college or colleges of arts and sciences is more intimate than with reference to the departments of other colleges.

3. The president may consult with both the deans and the professors of the department concerned, and not infrequently he may consult with the professors of allied departments.

I think it may be said that in general the president in the exercise of his authority of nomination takes advantage of all available sources of information. Any president who acted independently would have a brief tenure of office. In short, it is the general rule for the president before making a recommendation to have the concurrence of the professors of the department concerned, the dean or director of the school or college interested, and frequently the professors of allied departments.

Nevertheless, it does not follow that the president always follows the recommendations received. While he would not nominate a man contrary to the wishes of interested officers, he may decline to make a nomination or promotion of a man recommended by a department. In other words, he exercises the veto power. In some cases the president instead of exercising the veto power transmits the recommendations of the department with the information that he does not concur in them. The result is the same. The presidents of this association report that under such circumstances the governing boards hold the president responsible and invariably refuse to make an appointment which has not his concurrence. While the president must necessarily depend upon the sources of information mentioned with reference to professorial attainment, another important factor in the success of a professor and his fitness for work in an institution is the personality of the man in reference to energy, adaptability, and other general qualities. Concerning these points the president has a right to a judgment. If a man does not in his opinion come up to the standards which he holds, he may decline to make a nomination or recommendation for promotion urged by a department.

Finally after a department is once established, very exceptionally the president might take the initiative in the nomination of a man of professorial rank. Such an action could only be justifiable in case the president does not have confidence in the department as it exists. This situation is more likely to occur in institutions that are trying to

raise their faculties to a higher standard, for instance from that of a college to a university, than in those institutions the departments of which are well established and on a somewhat permanent basis.

The extent to which the president personally participates in the councils leading to the nomination of a man depends largely upon the proposed rank of the man. His participation is usually more intimate with reference to the nomination of men whose appointments are indeterminate—professors and associate professors; he is perhaps more likely to accept the judgment of others without close personal investigation in the case of the assistant professor who is appointed for a definite term, and a mistake in reference to which is not so serious a matter. He usually accepts without question the recommendation of the department or a dean for instructors and lower ranks.

THE POWER OF THE PRESIDENT

It is clear from the above statement of facts that the president of the university for the great majority of the institutions of this Association occupies a very important place in the building-up of the staff. The question therefore arises as to whether his authority should be curtailed. During the past half dozen years a number of papers^{*} have appeared which have strongly urged this, not only with reference to appointment and removal, but in other directions. The writers of some of these have gone so far as to state that the office of president should be abolished. With reference to the particular point under discussion—the appointment and promotion of the instructional staff—the only substitute for the exercise of the nominating power by the president which has come to my notice is that the faculty shall elect and dismiss the professors, this being subject merely to the veto of the trustees. This proposal goes farther than the practice of the Prussian universities. There the faculty nominates three members for a vacant professorship from among whom the minister of education selects one; but in one case out of three during the last seventy years, according to President Pritchett,[†] the minister has gone altogether outside of this list. The reason assigned for so doing was that the faculties are likely to be influenced by "personal considerations in their choice, not by considerations of the highest usefulness of the man to be chosen." The implication that if in America the office of president were abolished and his duties assigned to the faculty, the situation would be similar to that in Germany, is erroneous; since in Germany the minister of education to a large extent performs the functions that the president does in America. Indeed, with reference to the appointment of professors it is clear that the power of the minister in Germany is quite as great as that of the president in America.

* This class of papers is illustrated by James P. Munro, "Closer Relations between Faculties and Trustees," *Science*, XXII (1905), 848-55; George M. Stratton, "Externalism in American Universities," *Atlantic Monthly*, C (1907), 512-19; J. McKeen Cattell, "Academic Control," *Science* (March 25, 1906); Joseph Jastrow, "Academic Aspects of Administration," *Popular Science Monthly*, LXXIII (October, 1908), 326-39.

† Henry S. Pritchett, *Atlantic Monthly*, XCVI, 296.

The proposal to have the faculties make nominations of professors has a certain plausibility, and as we have seen is practiced in four institutions, but the plan has not generally appealed to the judgments of the governing boards, nor do I think it probable that it will in the future.

The fatal defect in the administration of a university by the faculty rather than by the educational executive officers is its extravagance. When an educational institution was small the faculty could do its administrative work. But in large universities in the consideration of educational policies which are agreed should belong entirely to the faculty, progress can only be made by sending a matter first to a faculty committee. The committee spends much time in whipping the matter into shape. It then goes to the appropriate faculty. After consideration more or less prolonged, if favorably acted upon, it goes to a university faculty, academic senate, or academic council. This body in turn goes over the subject and finally acts. It must be admitted that this procedure is extremely expensive.

While expensive, I am not, however, arguing for a change. University unity is more important than administrative efficiency, and in order to secure harmony in a university, it is necessary that the faculty exercise authority with reference to educational policies. While costly, it will be necessary to leave educational policies in the hands of the faculty.

But if all the questions of administration, including that of appointment, were to be handled by the faculty acting either as a committee of the whole or through its committees which in turn report to the faculty, the faculty would have much less time to devote to their main duties—instruction and investigation. This would be the result of “increasing the legislative and administrative responsibility of the faculty” as proposed by Munro.¹

At this point there is a curious inconsistency in the position of many members of the faculties. At the very same time that they are complaining of the extent of authority of the executive officers they are also complaining of the amount of committee work which is required of them. They state that even with the situation as it is so much committee work is required that they are unable to do satisfactorily their own work.

These and other considerations have resulted in a tendency not in the direction of curtailing the power of the president in reference to appointment, but, on the contrary, for the governing boards to place that power in his hands and hold him responsible. This is illustrated by Virginia, an institution which, after having lived nearly one hundred years without a president, has created that office; and the University of Toronto which was even more recently reorganized along American lines with a president having practically the same powers as in the United States.

The only constructive suggestion which I have seen in reference to the president is to have the professors rather than the governing boards elect him and determine

¹ James P. Munro, “Closer Relations between Faculties and Trustees,” *Science*, XXII (1905), 848–55.

his powers.² While it is not probable that the governing boards will consider this proposal, if it were adopted, I suspect it would turn out that in order to secure efficiency of administration the president would exercise substantially the same powers that he now does; and this would be the case whether or not it was originally so planned. If an educational executive officer is essential, then he must have the powers which are necessary to give efficiency, and as a result of evolution these powers would probably not very greatly differ whether the officer were elected by the faculty or by the trustees. Whether the faculties would choose presidents more wisely than the trustees may well be doubted; and the exercise of the function would be very likely to introduce factional strife which might endanger the usefulness of the man selected.

In reference to the particular point under discussion—the appointment, promotion, and removal of professors—it cannot, I think, be charged that the president does not fully realize the seriousness of his responsibility; indeed, of all of his functions that of nomination to the faculty is the one through which he is able to make the largest impression upon the development of an institution. If he is wise and successful in this and a faculty of high grade is built up, the reputation and influence of the university will be a rising one.

It appears probable that if there is any formal development in the near future in reference to appointment, it will not be in the direction of taking away the nominating power from the president, but toward having the president exercise the power reposed in him, after consultation or concurrence with some other academic body, as in the case of the council at Johns Hopkins and the advisory board at Stanford. In this connection the question arises as to whether or not it would be better for the more numerous institutions in which the president exercises this power without any regulation, but under well defined principles, to formulate them into rules. Upon this point there doubtless will be great difference of opinion.

If future development goes in the direction of formulating rules for the advice of the president in the exercise of his power of nomination, it seems to me that it would be advantageous for them to be along the lines of providing a changing body for each case. The great strength of this plan would be that the president would continue to consult all the interested parties; whereas, an academic council may be largely composed of men who do not know the facts at first hand. This point is illustrated by the self-imposed rule of the president of the University of California who, when considering the appointment of a man of professorial rank, calls together a committee of the professors of the five nearest related departments for conference. But this very case illustrates the difficulty of the formulation of the principles of advice into rules. In some instances it might not be advisable to consult with so many departments as five and in other cases more than that number.

² George M. Stratton, "Externalism in American Universities," *Atlantic Monthly*, C (1907), 512-19.

Considering the whole situation I think it would be well to announce as a fixed practice, where this is not already understood, that the president in the exercise of his authority of recommendation to the governing board as to appointments, promotions, and removals, should do so only after consulting the executive officers of the school or college concerned, and in cases where he regarded it as advisable, the members of the department concerned, with the recognized right of consultation upon the part of the members of such departments. If this were done, the faculty, the governing board, and the public would know that the president in the exercise of his powers of recommendation has had the advice of some responsible academic body, and the cry of "czardom," "tyranny," "the powers of academic life and death," in reference to the president, which in most cases is wholly without foundation, would be lessened.

THE FACTS AS TO TENURE OF APPOINTMENT

In general the appointments of professors are "during good behavior," or "at the pleasure of the board." In some institutions the appointments are of indefinite tenure, or permanent. In all cases the meaning is the same, that the appointment is one for life to the age of retirement, provided the appointee is efficient.

The only variations from the above are as follows: At the Catholic University professors may be appointed for an indefinite period, for a specified time, on probation, or to serve a temporary purpose. At Clark professors are appointed first for a term of five years and if reappointed "at the pleasure of the board." At Columbia appointments to professorial rank are for three years or at the pleasure of the board. Other institutions make occasional appointments for a definite term.

In general the terms of appointment of associate professors are the same as for professors. (Here are included the junior professors of Michigan.) The exceptions are as follows: At Johns Hopkins the associate professor for the first five years has an annual appointment, and thereafter on the professorial basis. At Stanford associate professors are appointed for five years. Some institutions do not have the rank of associate professor.

Assistant professors are usually appointed for a definite period, often for three years, but sometimes a shorter or longer period. The institutions varying from the three-year term are as follows: California, one year; Catholic, either indefinite or determinate; Chicago, four years; Columbia, one year (called junior professors); Cornell five years; Harvard, five years; Johns Hopkins (associates), one year; Kansas, annual for two years, thereafter permanent; Illinois, permanent; Iowa, permanent; Indiana, permanent; Minnesota, indefinite; Missouri, indefinite; Nebraska, permanent; Princeton, permanent; preceptors with the rank of assistant professor, for a specified term; Catholic and Johns Hopkins do not have assistant professors. It is notable that with the exception of Princeton the institutions which at once or almost immediately make the appointment of assistant professors for a permanent or indefinite tenure are a group

of state universities in adjacent states—Indiana, Iowa, Illinois, Missouri, Kansas, Nebraska, and Minnesota. For this geographic association I have no explanation to offer, but doubtless a sufficiently deep investigation would find one.

While not properly included in the scope of this paper, for the purposes of comparison the tenure of instructors is also given. For the most part instructors are appointed for a period of one year. The exceptions are as follows: Chicago, three years; Cornell, after one or more years' experience, two years; Harvard, annually, or for a term of three years; Indiana, permanent; Minnesota, indefinite; Nebraska, permanent; Virginia, usually indefinite, but subject to termination at the instance of either party; Yale, one or two years.

From the above statement of facts it appears that the practice of the institutions belonging to the Association of American universities with reference to tenure of appointment is well crystallized. Appointments of professors and associate professors are practically permanent. While in several institutions assistant professors are appointed for an undetermined or permanent term, commonly they are appointed for a definite term, and there is a strong tendency to make it three years. For instance, in some institutions where the appointment in the past has been for a longer period, five years, it has been changed to three years, as recently at Yale. In other cases where the appointment has been for a briefer term than three years, it has been extended to three years.

I am not aware of any criticism as to the above principles concerning tenure of appointment. They seem satisfactory alike to the trustees and to the faculty. In making the appointment of assistant professor for a period of years greater than one, it is recognized that the man is far enough along so that the question need not be raised each year as to his fitness to continue; but also in the majority of institutions it is recognized that after having had a reasonable time in which to "make good" the question should come up without embarrassment to the authorities as to whether or not he shall be reappointed. Also at this time the question of his promotion naturally arises.

PROFESSORS SHOULD BE EFFICIENT

The question now arises as to what should be done in the case of a man of professional rank, whether full, associate, or assistant, who is not efficient. Not infrequently papers with reference to this subject appear to assume that universities exist for the instructional force; that the main thing is to give that force a comfortable and happy time, an opportunity for a somewhat easy existence as a teacher, leisure for browsing through literature, and long vacations. I shall not consider the merits of this hypothesis, but shall say merely that I adhere to the ancient view that universities do not exist for the instructional force nor even for the administrative officers, which include the president, but that they do exist for the students and for the public. This view I suspect governing boards as representatives of the public will continue to insist upon.

If this view be accepted it follows that the instructional force of a university, both

young and old, must be efficient. Whether or not a man is retained in a faculty should depend upon his capacity to meet his duty to the institution. There is no possible excuse for retaining on the staff of a university an inefficient man. In rapidly growing institutions, among the older men, it often happens that there are those who have worn out their lives in their service and who have fallen behind their standards, and in justice these men cannot be requested to resign or be summarily dismissed. If in any institution there are such men, they should be pensioned. The right to efficient instruction by the students should be respected. And certainly the young men on the staff of a university can claim no exemption from the principle that they are to be judged by the efficiency of their service to the students and to the public. This means that they must be good teachers or good scholars, or both.

Strongly contrasting with the above view is that presented by Lawton,¹ who says in reference to the professor: "His position should be as secure as one on the Supreme Bench, unless senile decay, permanent mental or physical disease, or fatal moral lapse, make clearly obligatory his enforced (if not voluntary) retirement by a court composed largely of his associates." And Stratton² says: "The faculty alone should normally have the power to dismiss its own members."

If the above views were accepted what chance would there be for a change in a chair occupied by an inefficient man? Can it be assumed with any degree of plausibility that there would be one change per annum in the entire twenty-two institutions of this association?

Throughout history it has been the desire of the privileged classes to allow none but the members of the class itself to remove, reduce, or punish its own members, and oftentimes these desires have been recognized. But in modern times, for the majority of civilized nations, such privileges have been taken from the nobility; they are not likely to be instituted for the class of professors in America.

The responsibility of the governing board and the executive educational officers to the students and to the people is vastly greater than any obligation to the professor. The funds for the disbursement of which they are responsible are trust funds which to the best of their ability should be expended to accomplish the purpose for which they are available; and this is true whether the money comes from the public treasury or from private sources. If a professor does not efficiently perform his work he should not be continued. For a given institution, if care has been exercised in the building up of the faculty, the cases requiring so drastic action as request for resignation or removal will be only occasional. In the great majority of cases, when the function of change is exercised because of the inefficiency of a professor, it has made no difficulty or comment; indeed, has rather strengthened the confidence of the faculty and the public in the

¹ William C. Lawton, "The Decay of Academic Courage," *Educational Review*, XXXII, 402.

² George M. Stratton, "Externalism in American Universities," *Atlantic Monthly*, C (1907), 512-19.

governing body. For my own part it appears clear that the ultimate authority to ask the resignation of or to remove a professor must rest with the governing board under the advice of the officer or officers who make recommendations as to appointments and promotions. The exercise of this authority should be clearly exceptional; but certainly it should be performed whenever a professor is clearly inefficient.

The only cases which have occasioned any serious discussion in reference to the tenure of professors have been those in which for some purpose, apparently not directly connected with the duties of a man or his good behavior, he has been dismissed. I shall not give specific instances, but doubtless each representative here will be able to think of one or more instances of this kind.

For such extremely exceptional cases I would propose no rule. Full responsibility must rest with the appointing authorities. If they exercise the power of removal arbitrarily, the public will hold them sternly accountable, and the institution itself will suffer, because good men will not be so likely to go to a university in which the power of removal has been exercised in an indefensible manner, or exercised in a manner in reference to which there is any doubt. The public will always give the professor the benefit of the doubt. In some cases where an institution has had a fairly good defense for the removal of a man, it has suffered for years in consequence of so doing. The punishment of the offending university by public condemnation is the most effective protection for the professor against arbitrary or unjustifiable removal.

In the discussion which followed, Mr. Jordan spoke of his experiences in dealing with cases of inefficiency. Mr. Lowell and Mr. Van Hise brought out clearly the fact that a difference must necessarily exist in methods employed in the western state universities and in the older endowed universities of the East.

The Committee on Nominations reported as follows:

For *President*—The representative of the University of Virginia.

For *Vice-President*—The representative of the University of Illinois.

For *Secretary and Treasurer*—The representative of Harvard University to 1913.

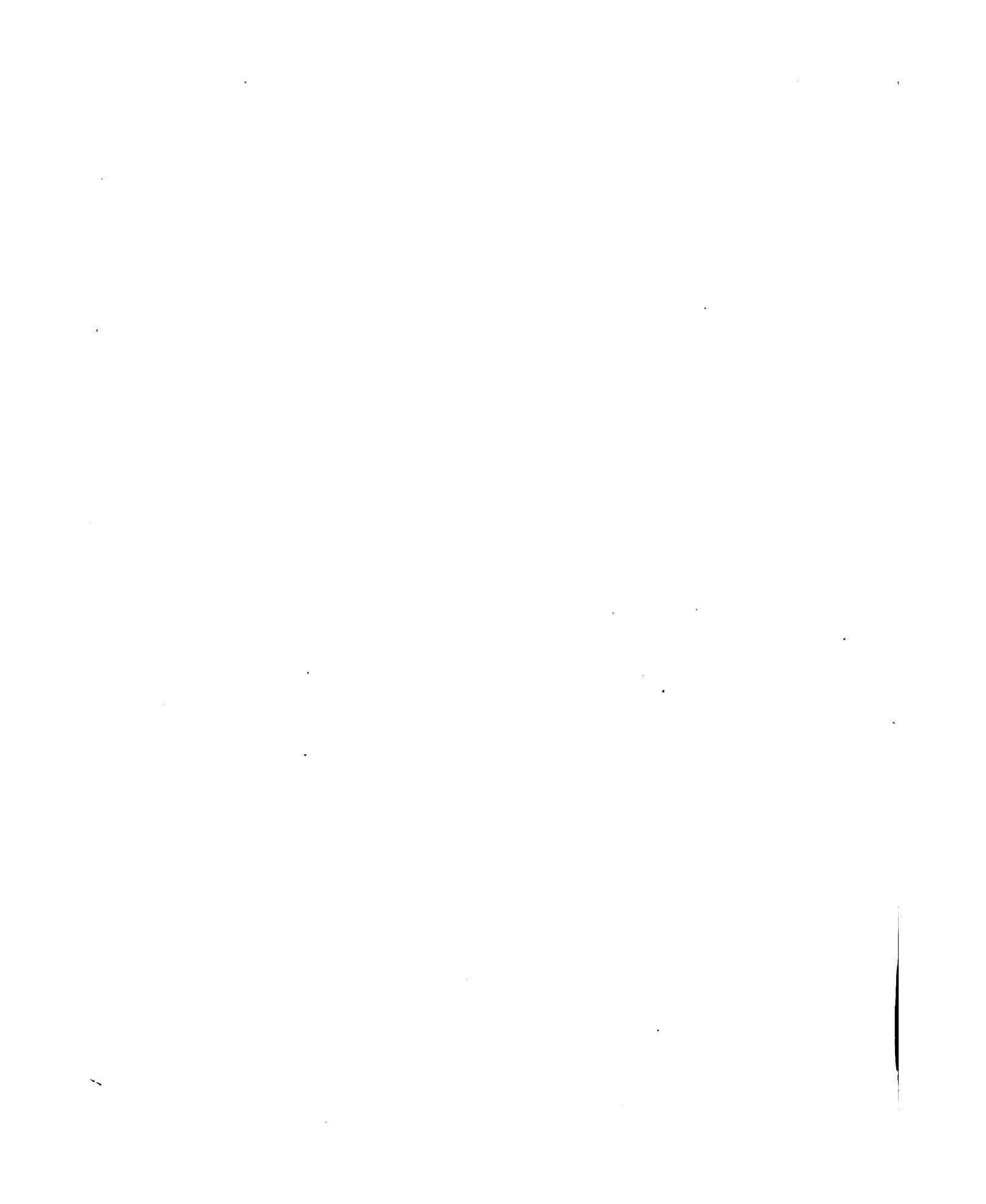
Additional members to the Executive Committee, the representatives of Columbia University and of the University of Missouri.

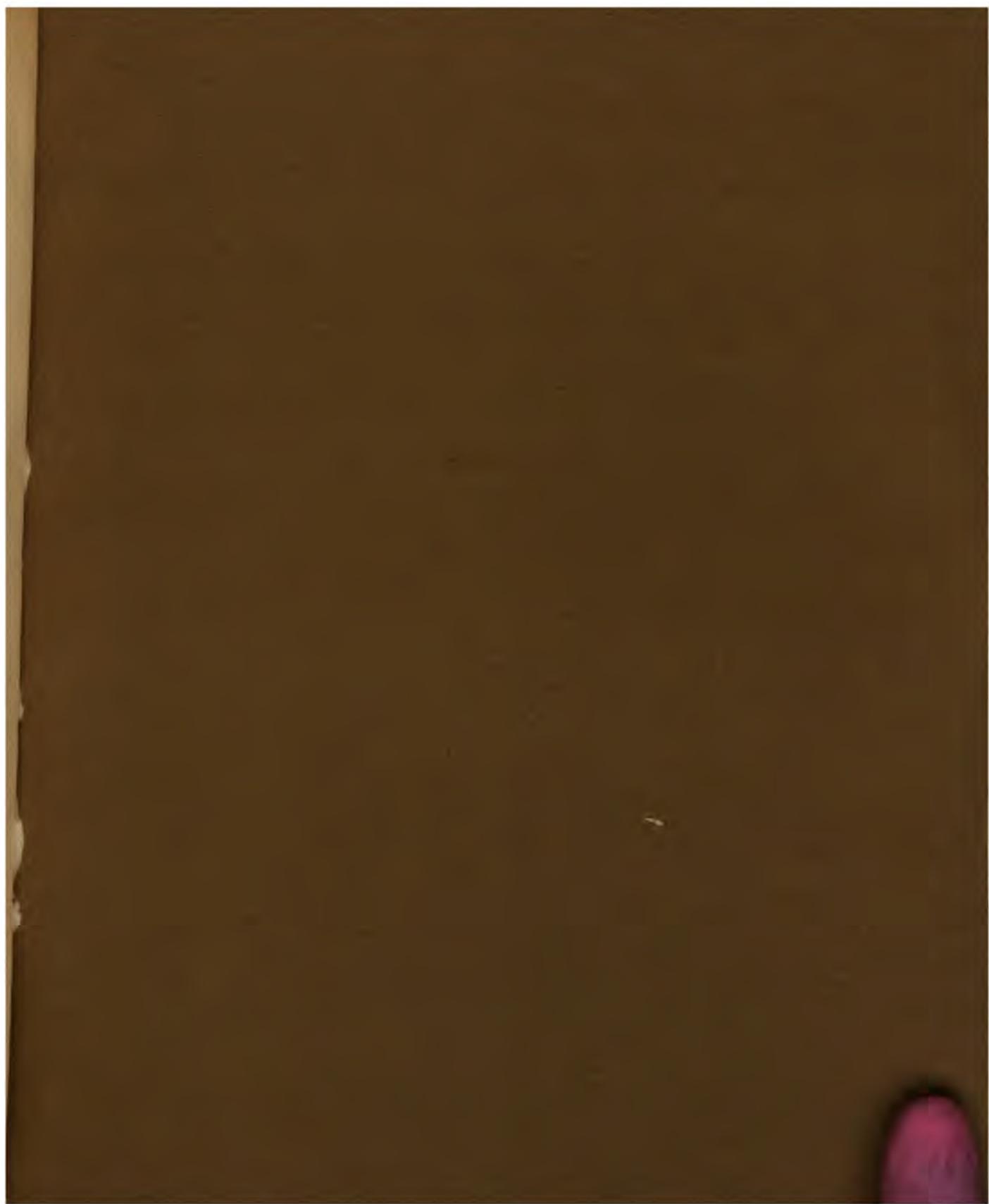
Upon recommendation of the Executive Committee it was resolved to accept the invitation of the University of Chicago, to hold the next meeting at Chicago.

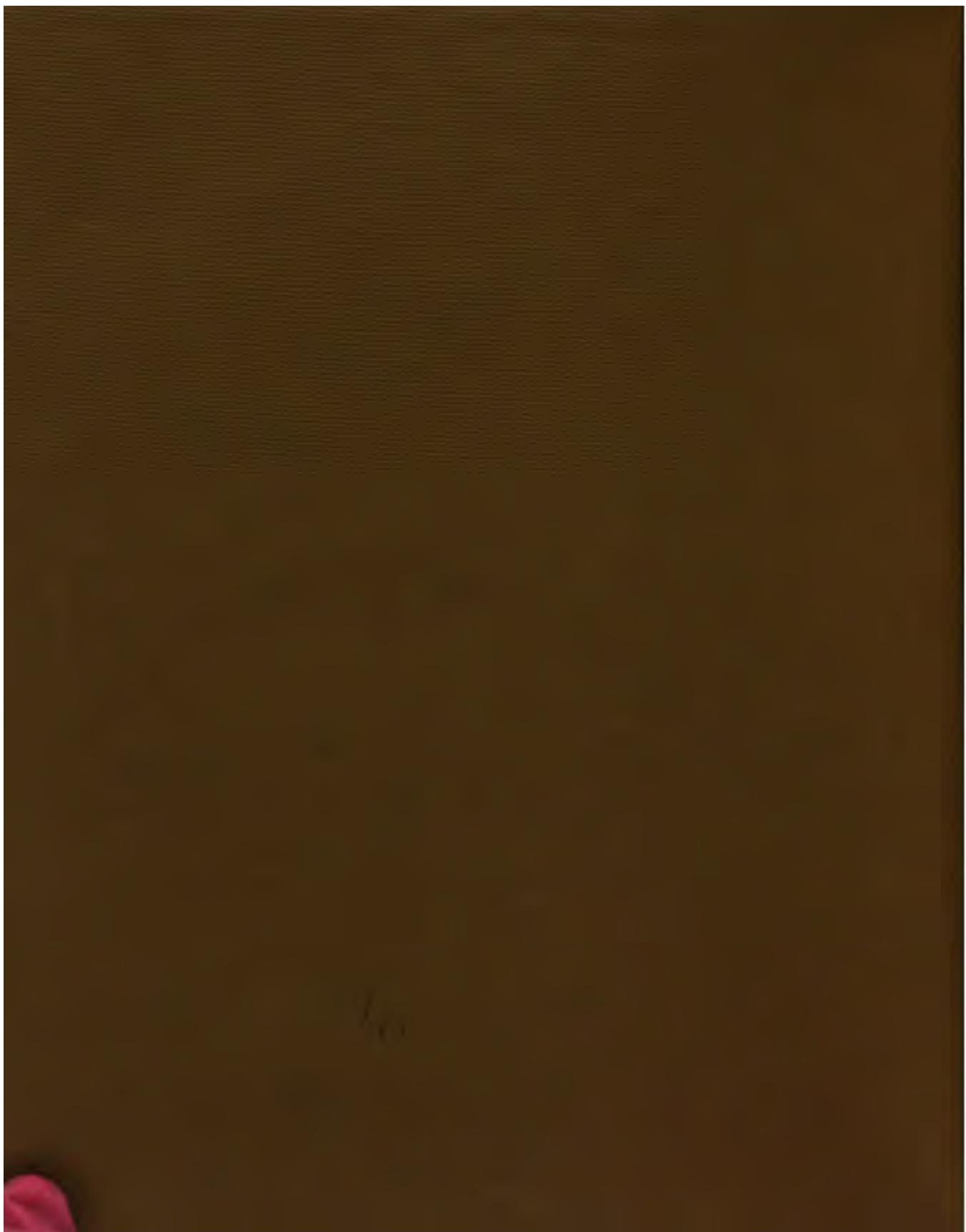
Upon motion, the following resolution was adopted:

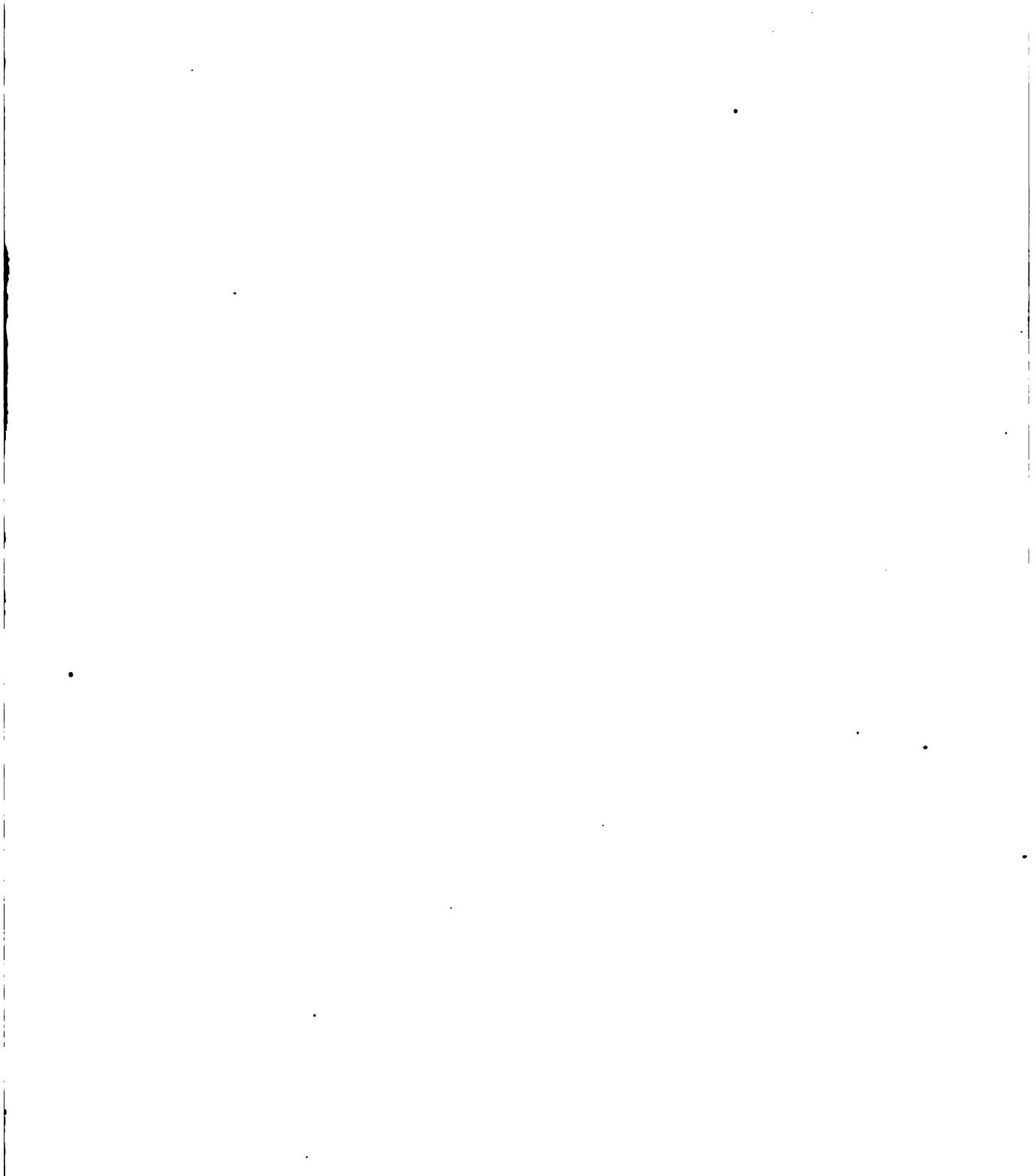
That the members of the Association of American Universities wish to convey to the representatives of the University of Virginia the warm appreciation of their cordial hospitality.

Upon motion the meeting adjourned.











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